

# **NATIONAL POWER CORPORATION**

## **A Case Study of a Power Industry PHILIPPINES**

**Submitted to the  
INTERNATIONAL DEVELOPMENT RESEARCH CENTRE**



**development academy of the philippines**

NATIONAL POWER CORPORATION

A Case Study of a Power Industry  
Philippines

Submitted to the

International Development Research Centre

Development Academy of the Philippines  
April 1978

## TABLE OF CONTENTS

|  |    |
|--|----|
| INTRODUCTION   | 1  |
| PART ONE : GOALS, MISSIONS AND TARGETS, CONSTRAINTS<br>AND OPPORTUNITIES |    |
| A. GOAL STRUCTURE  | 3  |
| B. CONSTRAINTS AND OPPORTUNITIES   | 6  |
| 1. External Constraints and Opportunities                                | 6  |
| 2. Internal Constraints and Opportunities                                | 8  |
| 3. Product and Factor Markets  | 10 |
| PART TWO : INTERNAL MANAGERIAL FACTORS                                   |    |
| A. ORGANIZATIONAL STRUCTURE  | 15 |
| 1. Heirarchy of Supervision  | 15 |
| 2. Patterns of Top Management  | 17 |
| 3. Sources of Top Management   | 20 |
| B. PRODUCTION MANAGEMENT   | 21 |
| 1. Production Organizational Structure<br>and Controls                   | 22 |
| 2. Operations  | 28 |
| C. FINANCIAL MANAGEMENT  | 33 |
| 1. Objectives  | 33 |
| 2. Organizational Structure and Controls                                 | 33 |
| 3. Financial Operations  | 34 |
| 4. Summary of Conclusions on Financial<br>Management                     | 42 |
| D. MATERIALS MANAGEMENT  | 46 |
| 1. Objectives  | 46 |
| 2. Organizational Structure and Controls                                 | 46 |
| 3. Operations  | 47 |
| 4. Conclusions   | 60 |
| E. PERSONNEL MANAGEMENT  | 64 |
| 1. Objectives  | 64 |
| 2. Organizational Structure and Controls                                 | 64 |
| 3. Operations  | 68 |
| 4. Conclusions   | 71 |
| F. MARKETING   | 73 |

PART THREE : QUANTITATIVE ANALYSIS

|   |    |
|---|----|
| A. SOCIAL COST-BENEFIT ANALYSIS                 | 74 |
| 1. Evaluation Approach                          | 74 |
| 2. Valuation of Resources                       | 74 |
| 3. Methods of Computation                       | 75 |
| 4. Bibliography on Social Cost-Benefit Analysis | 78 |

APPENDICES

|  |     |
|--|-----|
| A. Revised Charter for the National Power Corporation as Amended   | 79  |
| B. P.D. No. 380--Amending certain Sections of R.A. 6395 entitled "An Act Revising the Charter of the National Power Corporation" | 92  |
| C. Commonwealth Act No. 120--Creating the National Power Corporation   | 100 |
| D. NPC System Development Programs   | 106 |
| E. Fringe Benefits of NPC Employees  | 109 |



## I N T R O D U C T I O N

### OVERVIEW OF THE POWER INDUSTRY

The Philippine power industry is quite different from other Asian countries'. It consists of some 450 public and private utilities. The National Power Corporation (NPC) dominates the public sector, while the Manila Electric Company (MECO) is the largest private utility company.

As a bulk supplier of electricity, the NPC generates power from its 12 hydroelectric and thermal plants (650 MW total capacity, 1975) and delivers it to small private and municipal owned utilities and large industries. MECO operates in the Metro Manila Area. It generates power from its thermal plants (1,368 MW capacity) and distributes it to retail consumers and some utilities in bulk.

In the rural areas, small and municipal utilities provide limited service. About two-thirds of these 450 utilities purchase power from NPC and MECO and distribute to final users. The last third has self-generating plant providing substandard and costly services to final users. In 1969, the government established the National Electrification Administration (NEA) to set up cooperatives to integrate electricity distribution in rural areas.

Recent government policies have made NPC responsible for development of future power generations needs, construction of power grids and ultimately owning and operating all generating facilities. Negotiations between the Government and MECO began in August 1975 for acquisition by NPC of MECO's generating and transmission facilities. MECO, the largest generating and distributing enterprise, will eventually become a distributing utility only.

### BRIEF HISTORY OF THE NATIONAL POWER CORPORATION

The National Power Corporation (NPC) was established by the government in November, 1936, primarily to pursue the utilization of Philippine water and other resources for power generation to supply both urban and rural electrification requirements of the country. In its 30-year operations, it has grown in several stages to develop into one of the bigger public enterprises.

Its first major project, Caliraya Hydroelectric (HE) Plant (32 MW), was initiated in 1941 but did not operate until November 1945 due to the Pacific War. By 1950, it had begun construction of the Ambuklao (75 MW) and Maria Cristina (100 MW) HE Plants. Its fourth major project, Binga HE Plant (100 MW), was followed by the Angat HE Plant (212 MW) made operational in July 1967. By the end of 1975, the NPC completed a thermal plant, Bataan Plant (75 MW); and was operating seven other minor electric plants. With these facilities, NPC now sells bulk power to 148 private utilities and 106 large industries. The private utilities in turn serves 300 cities and municipalities.

In view of the on-going oil energy crisis, NPC has focused on the construction of other hydroelectric plants. The Pantabangan Project which would be operational by 1977 will be able to provide, in part, the incremental electricity requirements in Luzon area. It has also pursued projects on geothermal power generation. Smaller amount of power can also be generated from two identified geothermal projects in Tiwi, Albay and Los Baños, Laguna. And finally, the national government has opened bids for construction of nuclear plants in the country which would be managed by the NPC.

PART ONE

GOALS, MISSIONS AND TARGETS, CONSTRAINTS AND OPPORTUNITIES

## A. GOAL STRUCTURE

### ESTABLISHMENT MOTIVES

In its initial establishment in November, 1936 (Commonwealth Act 120), the broad social objectives of this enterprise was to develop, utilize and conserve Philippine water resources for all beneficial uses, including power generation. Consequently, it was also aimed at providing total electrification of the country through development of power from all sources to meet industrial development and dispersal and the needs of rural electrification.

In January and February of 1974, the objectives and participation of the National Power Corporation (NPC) in the power industry was extended by Presidential Decrees 380 and 395 to include the responsibility for setting up transmission line grids and construction of all future generating facilities and alternately, as well as to own and operate the only integrated national generating facilities.

To be able to achieve its major objectives, the government has increased NPC capitalization from P300 M to P2 B and extended its corporate life for another 50 years to year 2036. Moreover, it has supported the enterprise by providing assistance to all its planning agencies and financial institutions.

### GOALS AND MISSION

#### Power Generation

The specific goals and mission of NPC have been invariably related to power generation and installation of transmission lines to bulk users. The lack of comprehensive data on past trends and absence of up-dated demand forecasts have hampered much discussions on future demands. However, the NPC has recently prepared a demand forecast which projected demand to increase by an average of 7.75 per cent per year during 1975-85. In the light of these historical growth rates, past elasticity of power to GNP and growth prospects of the Philippine economy, this demand appears to be conservative. While it has been observed over time--the elasticity of electricity consumption to GNP declines as a country develops--the elasticity in the Philippines is unlikely to be as low as 1.0, which is implicit in the NPC forecast.

Despite the conservative demand forecast, the NPC major target on power generation for the next ten years is to provide an additional 4,900 MW power capacity (9.9 annual growth rate) producing 23,600 GWM of energy (11 annual growth rate). Table 1 on the next page shows the regional distribution of actual and projected generating capacity and emergency production of 1975 and 1985. Assumption has been made that no generating facilities will be constructed by the private utility.

This program is set out in detail in Appendix D and includes all on-going projects: two 600 MW nuclear plants to operate in 1983 and 1984, as well as nine geothermal plants with 50MW capacity each.

#### Trans

#### Transmission Lines and Substations

To be able to transmit the added electricity output (23,600 GWM) by 1985 to bulk users, NPC has targeted the expansion of its transmission network by some 3,000 kms of assorted 230, 115, 138 and 69 KV lines. It is also committed to construct 100 additional substations (300-+ NVA transformers 230-69 KV PCB's).



TABLE I

ACTUAL AND PROJECTED GENERATING CAPACITY  
AND ENERGY PRODUCTION, 1975 and 1985

| <u>Region</u> | <u>POWER CAPACITY (MW)</u> |              | <u>Average Annual<br/>Growth, 1975-85</u> |
|---------------|----------------------------|--------------|---|
|               | <u>1975</u>                | <u>1985</u>  |   |
| Luzon         | 1,940                      | 5,185        | 9.4                                       |
| Visayas       | 300                        | 900          | 10.6                                      |
| Mindanao      | <u>452</u>                 | <u>1,500</u> | <u>11.4</u>                               |
| Philippines   | 2,692                      | 7,585        | 9.9                                       |

| <u>ENERGY (GWM)</u> |              |              |             |
|---------------------|--------------|--------------|-------------|
| Luzon               | 8,242        | 22,800       | 9.7         |
| Visayas             | 1,140        | 4,235        | 12.7        |
| Mindanao            | <u>1,582</u> | <u>7,500</u> | <u>15.2</u> |
| Philippines         | 10,964       | 34,535       | 11.0        |

## B. CONSTRAINTS AND OPPORTUNITIES

### 1. External Constraints and Opportunities

Like most public enterprises in the country, the National Power Corporation has been faced with exogeneous limits in its operations. In its 50-year corporate life, the National government has had large control over the enterprise. This is primarily due to total subscription and ownership of NPC capital side by the government. And equally important, the urgency to manage energy resources due to the recent oil embargo and price increase by the organization of Petroleum Exporting Countries (OPEC) has focused national government efforts to consolidate much of its institutional and other inputs in designing a decentralized and integrated approach to the crisis. As a result, NPC is one of several public enterprises which has been transferred in purview from the office of the President to the Department of Public Works, Transportation and Communications in December, 1975.

#### a. Control Structure

The National Power Corporation is supervised by the Department of Public Works, Transportation and Communications (DPWTC). It is also subject to review by the Budget Commission, Central Bank of the Philippines, Public Service Commission, Civil Service Commission and the Energy Development Board, and audited by the Commission on Audit which are directly under the Office of the President. Each of the above mentioned agencies has a degree of oversight on NPC operations.

#### b. Area of Control

- o Appointment of Chairman and Members of the Board. The President of the Philippines appoints five (5) board members of the Board who elect the Chairman.
- o Approval of New Investment Proposals. As of 1973, the Energy Development Board approves all new investment proposals of NPC but does not actually participate in the planning phase of new projects.
- o Approval and Acquisition of External Loans. Since about 70 percent of total investment outlay originates externally, the Central Bank approves all NPC loan proposals after initial approval by the Energy Development Board. It also assists and negotiates loans for NPC.
- o Construction of New Projects. Outside of planning for new plants and equipment, the Department of Public Works, Transportation and Communications assists and supervises NPC in constructions of new projects.

- o Budgeting. The NPC submits yearly operations budget to the Budget Commission for approval.
- o Price Ceilings. NPC charges to bulk users are approved by the Energy Development Board after review by the Public Service Commission.
- o Output Allocation. Geographical and user output allocations are set by the Energy Development Board on recommendation of the NPC.
- o Auditing. The Commission on Audit examines the financial operations of NPC annually.

The Government also exercises control over personnel employment through the Civil Service Commission. Wages and classification of personnel positions of NPC are approved by the Wage Commission.

c. Degree of Control

Government control over the following areas is most vigorous.

- o Appointments of board members and other major officers.
- o Planning and investment sanctions
- o Price ceilings
- o Output allocation

In particular, appointments of board members and other major officers by the President are absolute:

CA 120. "all corporate powers of the National Power Corporations shall be vested in a board to be known as National Power Board; composed of five members who shall be appointed by the President of the Philippines, with the consent of the Commission on Appointments of the National Assembly."

CA 120. "The Manager, Assistant Manager and Treasurer shall be appointed by the President of the Philippines, with the consent of the Commission on Appointments of the National Assembly."

Planning of new micro projects of NPC has to follow the broad guidelines of the Energy Development Board. Moreover, the Department of Public Works, Transportation and Communications supervise NPC in the actual designing and construction of new projects.

On investment sanctions, Presidential Decree 380 prescribes: "The President of the Philippines, by himself or through his duly authorized representative, is hereby authorized to negotiate and contract with foreign governments and any financial institution or fund sources, one or several loans for purposes of assisting in the reconstruction or promoting the development of the country."

Control of the Budget Commission on budgeted expenditures is limited only to the prior given year of operations. Like many Philippine public enterprises, NPC can rearrange its spending to a certain degree provided it does not exceed its total operational budget for the year. Rates charged to bulk users are largely controlled by the government. Any price increase has to be reviewed by the Public Service Commission and, later, approved by the Energy Development Board. Likewise, geographical and bulk user allocations are submitted to the Energy Development Board for approval.

Some of the major statutes and directives from the Executive Office and other agencies affecting NPC operations in the aforementioned areas are contained in the appendices.

## 2. Internal Constraints and Opportunities

Much of the internal constraints and opportunities inherent in NPC operation are directly related to its traditional areas of operations. These include the following:

### a. Financial Area

The equity base appears to be both an opportunity and constraint. Since its creation in late 1936, its equity has been raised several times to the present ₱2B level to expand its borrowing capacity.

The delay in increasing the equity, especially prior to September 1973, has had effects on the execution of immediate projects.

Flexibility in budgeting is another internal opportunity in NPC's financial operations. While the Budget Commission approves the annual budget prior to the operational year, the NPC can alter its composition provided it does not exceed the total amount approved by the commission.

Moreover, there are certain occasions when NPC, like other public enterprises, can request for additional outlays during the year, if absolutely necessary, to complement the annual budget.

b. Production Material Management Areas

Inadequate technology is a major production constraint of NPC. The inadequacy could be traced to lack of trained technical personnel within the organization who can prepare preliminary designs of generating and transmitting facilities. In most cases, the enterprise has to engage experts from consultants, foreign and local.

NPC also avails of the consultancy services, equipment and other materials which are tied up with the loans from foreign sources. Such tie-ups however limit the choice of origin of capital equipment and other inputs.

c. Marketing Area

As NPC is in a seller's market, there appears to be no major material constraint in its marketing operations.

d. Personnel Management

o Labor Relations

Much of the personnel management concern has been with labor relations. This was especially the case prior to the imposition of martial law when labor unions were rather militant in presenting demands to management. Lately, in the period 1974-1975, the NPC management experienced less aggressive labor demands. A combination of effective national policies toward labor--a P50 incremental cost-of-living allowance set by Presidential Decree No. 390 for employees earning less than P600 monthly, and a more effective communication between management and labor unions--have contributed largely to a cordial and effective relationship between the two.

A list of current fringe benefits is provided in Appendix E.

o Slow Rank-and-File Promotions.

A major internal constraint in personnel management is slow promotions among rank-and-file which account for approximately 70% of NPC total employment. The same, however, does not hold true in the middle and upper management levels of the corporation.

The slow rank-and-file promotions, however, is probably offset by the comparable wage levels for these types of services in other industries. Moreover, NPC employees have higher fringe benefits than those in the private sector.



- o Staff Development

Staff development is a major internal opportunity in the personnel management of NPC. In the fiscal year 1974-75, 469 employees went on training in their respective lines of work. The training programs, either in-plant or out, depending on the availability of training facilities, have proved effective.

- o Incentives and Awards

To boost the morale of employees, NPC has implemented the employee suggestion and incentive awards under Memo. No. 74-16, whereby monetary awards from P20 to P10,000 are given for beneficial suggestions, inventions, and superior accomplishments.

### 3. Product and Factor Markets

#### a. Product Market

- o Product Market Character

The NPC is in a seller's market. Presidential Decree No. 40 issued in November 1972 has virtually eliminated competition from the private sector in the generation and transmission of electricity. The promulgation of the decree has immensely restructured the market to expand the scope of responsibility of NPC. Following are the salient points of the decree:

- 1) The attainment of total electrification on an area coverage basis, which is a declared policy of the state, shall be effected primarily through:
  - o Setting up of island grids with central linked-up generation facilities.
  - o Setting up of cooperatives for distribution of power.
- 2) The setting up of transmission lines grids and constructions of associated generation facilities in Luzon, Visayas and Mindanao shall be the responsibility of the NPC as the authorized implementing agency of the state.
  - o Additions necessary to meet the increase in power demand of the area embraced by any grid may be set up by NPC.

- o In areas not embraced by the NPC grid, the state shall permit cooperatives, private utilities and local governments to own and operate isolated grids and generation facilities, subject to state regulation.
- 3) The distribution of electric power generated by NPC shall be undertaken by:
    - o Cooperatives
    - o Private Utilities
    - o Local Governments
    - o Other entities duly authorized subject to state regulations.
  - 4) Within the areas embraced by a grid set up by NPC, the state shall determine privately owned generating facilities which should be permitted to remain in operation.
  - 5) It is the ultimate objective of the state for NPC to own and operate a single integrated system, all generating facilities supplying electric power to the entire area embraced by any NPC grid.

In 1975, the total bulk users of electricity generated by NPC included 195 utilities and 100 industrial users. The electric utilities in turn served 340 cities and municipalities. It also delivered bulk electricity to Manila Electric Company.(MECO). Details of NPC energy generation and sales to users for the same year were as follows:

ENERGY GENERATION AND SALES, FY 1975  
(IN THOUSANDS)

| <u>ITEM</u>                        | <u>LUZON</u> | <u>VISAYAS</u> | <u>MINDANAO</u> | <u>TOTAL</u> |
|------------------------------------|--------------|----------------|-----------------|--------------|
| Total Energy                       |              |                |                 |              |
| Generated (MMH)                    | 2,335.4      | 8.9            | 509.2           | 2,853.5      |
| Station Use (MWH)                  | 32.1         | 0.3            | 1.4             | 33.8         |
| Net Energy Delivered to MECO (MWH) | 225.5        | -              | -               | 225.5        |
| Total Energy Delivered (MWH)       | 2,077.8      | 8.6            | 507.8           | 2,594.2      |
| Total Energy Sold (MWH)            | 1,988.1      | 8.1            | 495.0           | 2,491.3      |
| Total System Losses (MWH)          | 121.8        | 0.5            | 12.8            | 135.1        |
| Percentage Losses (%)              | 5.8          | 5.6            | 2.5             | 5.2          |

SOURCE: NPC Annual Report, FY-1975

### o Output Pricing

Output prices charged to bulk users are uniform, whether the utility is private or a government-organized cooperative. The same prices are charged to bulk users in the industry.

Output pricing is largely controlled by the Energy Development Board, which is directly under the office of the President, to pursue the national objective discussed earlier that energy production is a vital area where government participation is inherent. The NPC role in output pricing is to submit price increase proposals for approval of the Board.

In practice, any price increase approved by the Energy Development Board has been based primarily on increments in the prices of factors inputs which are, to a certain degree, not controlled by the enterprise. In a ten-year observation, price increases have largely been based on the following:

- 1) Increases in cost of capital goods which are largely imported
- 2) Increases in foreign exchange rate
- 3) Increases in prices of oil (High viscosity, Bunker "C" oil), and
- 4) Increases in wages

In essence, output pricing is a full-cost pricing based on a standard output level. Notice that in an annual operation, NPC realizes more income during the rainy than in the dry seasons. As much of its generating facilities are hyroelectric plants.

Actual price increases by NPC to users in the ten-year period are:

|      |               |
|------|---------------|
| 1965 | P 0.02487/KWH |
| 1970 | P 0.0347/KWH  |
| 1975 | P 0.0808/KWH  |

### b. Inputs Markets

Essentially, the inputs in the production of energy and its transmission could be broadly classified into the following categories:

#### o Labor

Labor acquisition, in general is not a problem in the country as there is adequate supply of both skilled and unskilled laborers and other employees supporting generation and transmission activities.

The number of annual engineering graduates from some ten (10) universities is more than what the industry can absorb. In most cases, newly graduated engineers who are considered for employment undergo training before they are hired. Unskilled laborers are readily available in the labor market, as are employees in support activities (i.e. Finance, Personnel, etc.).

o Capital

Much of the funds (50%-75%) for NPC projects originate largely from international borrowings. The remaining sum is generated by the national government mainly through taxation.

In the past 40 years, the external sources of NPC funds include the Export-Import Bank (USA), World Bank, Asian Development Bank, and long term Bond Flotations in Europe and the United States. Interest expenses from these sources usually average 7½% annually.

o Consultancy and Contractual Services

In many occasions, the NPC has to sub-contract the design and implementation of its projects. This is primarily due to tie-ups in loans for capital goods and equipment. Consultancy services are usually included in the same package.

o Other Raw Materials

Maintenance inputs e.g. Oil for thermal plants, transmission lines, etc.) are available in the intermediate markets. NPC has minimal difficulty in acquiring these maintenance inputs since much of these markets are well regulated by the national government.

P A R T   T W O

INTERNAL MANAGERIAL FACTORS



## I N T R O D U C T I O N

The preceding part dealt with the goal structure and prevailing external and internal constraints and opportunities of the National Power Corporation. This part discusses broadly the structure of the enterprise and a specific portion of its goal-seeking subsystem, the top management. It also describes and analyzes the NPC structure and controls and operations in the traditional areas of its productive activities, i.e., the financial, production and materials management, and the marketing and personnel administration.

As with any enterprise, the NPC has two major sub-systems. These are the goal-seeking subsystem and the technological subsystem. The first is a conglomeration of the organizational personnel and the pattern of their interaction as they seek to maximize resources and opportunities in the attainment of either or both organizational and individual goals and objectives. The other subsystem consists of (a) machines and materials which the goal-seeking components operate and utilize, and (b) the rules, processes and procedures which govern and guide the personnel in accomplishing their tasks.

The initial section of Part Two will discuss the broad parameters (managerial factors) present in the whole NPC organization that ultimately influence personnel interaction among themselves and with their clientele through and with the operation of the technological subsystem. And the succeeding sections will deal on how the overall managerial factors influence operations of the subcomponents of the enterprise.

## A. ORGANIZATIONAL STRUCTURE

All Philippine public enterprises have been broadly categorized in relation to control of the national government over their top management. The categories are of two types: the agencies and the corporations.

Agencies are Entities with non-corporate structure. This category is further divided into two: (a) Integrated departmental agencies and (b) Autonomous departmental agencies.

The public enterprises integrated as regular departmental agencies are usually called bureaus like the Bureau of Posts and so forth. On the other hand, autonomous departmental agencies are those which were created by special laws/decrees but which are attached to line departments of the national government. For instance, the Fertilizer Industry Authority is attached to the Department of Agriculture.

Corporations are Entities with corporate structure. This type is also divided into: (a) Government owned corporations (b) Government controlled corporations.

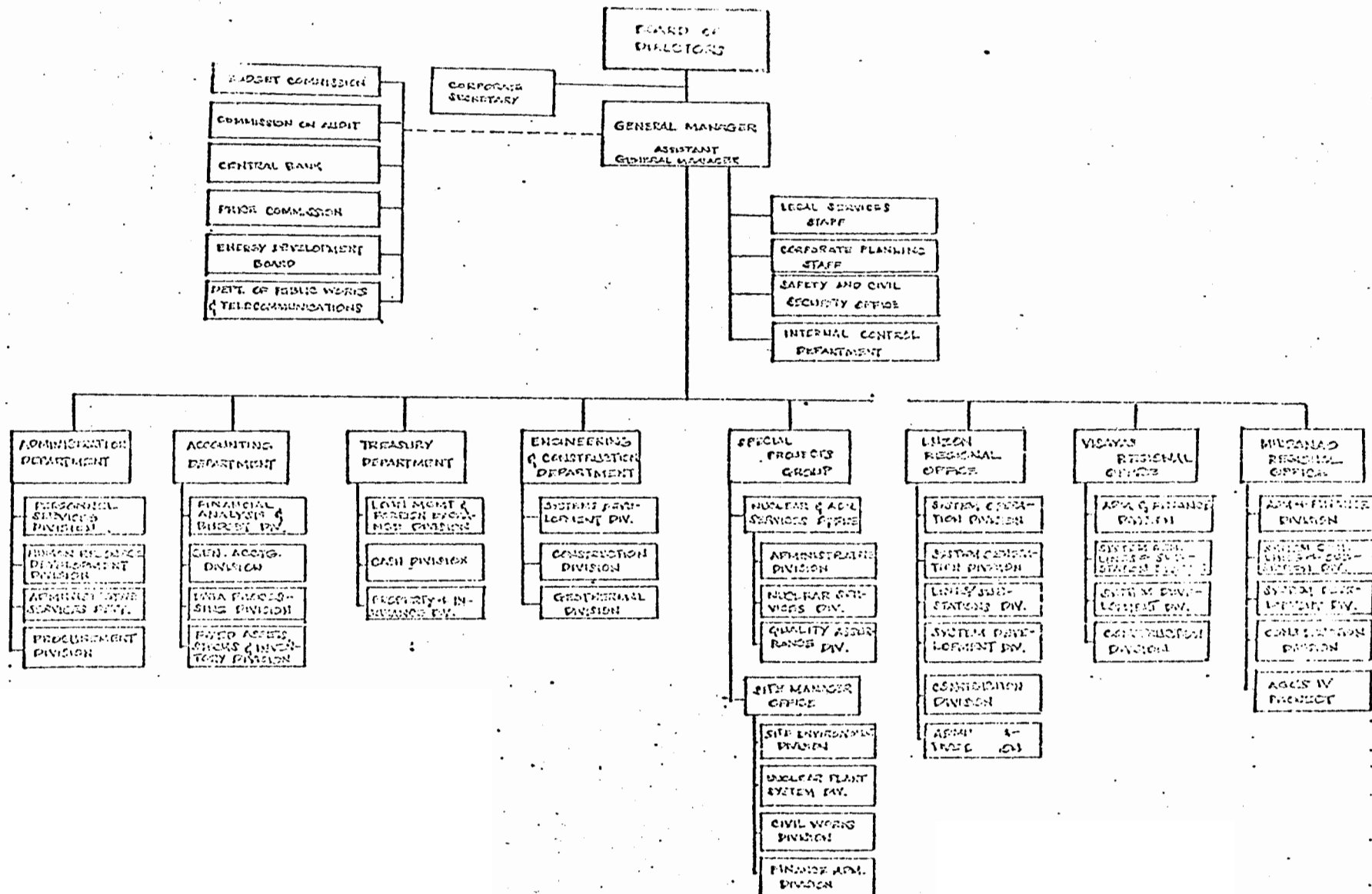
Government-owned corporations are those whose stocks are entirely owned and subscribed by the government; while government-controlled corporations are enterprises whose majority stocks or capitalization belongs to the government. In both cases, such corporations are also attached or supervised by line departments of the national government.

The National Power Corporation is a government-owned corporation supervised by the Department of Public Works and Telecommunications. Thus, the control entry point of the national government is through its Board of Directors which formulates the policies of the enterprise. Internal management of activities is the responsibility of the general manager. The NPC organizational chart shows the formal structure of the enterprise.

### 1. Hierarchy of Supervision

The formal organizational structure of NPC indicates a three-tiered supervisory formation.

The top management consists of the Board and the General Manager. The Board formulates the policies of the organization. The General Manager in turn operationalizes the policies formulated by the Board and directly manages the activities of the enterprise. He



NATIONAL POWER CORPORATION  
ORGANIZATIONAL CHART

is assisted by a staff which include the Legal Services Staff, Corporate Planning Staff, Safety and Civil Security Office and the Internal Control Department. The second supervisory level (i.e., the middle management) is comprised of department managers and division heads. And finally, the tertiary or lower management includes section and unit-chiefs.

Thus, the formal number of supervisory levels of NPC totals to only five. Compared to other government-owned or controlled corporations, supervisory levels range from four (4) to nine (9) and a model of 5 and an average of six (6).

However, the department supervisory level could still be informally classified into three types, namely: the regular departments, regional offices and a special projects group. Regular departments are the line units which are situated in the main offices whose main function is to supervise activities on all geographical areas of the country; while regional offices are line units servicing specific areas. These cover the Luzon, Visayas and Mindanao regional offices with structures patterned after the parent organization.

The third kind, the special projects group, is a recent innovation. It was established in response to the 1974 oil price increase and embargo by the organization of Petroleum Exporting Countries (OPEC). Its main function is to develop NPC generating capability through nuclear powered stations. Its divisions are Administrative, Nuclear Services, Quality Assurance, and Site and Environment Divisions.

The number therefore of supervisory levels of the enterprise has been mainly a function of the following:

- o The number of areas of operations of NPC (e.g. financial, production and other operations.)
- o The degree of regionalization of the enterprise; and
- o The recent high cost of oil and the development of newer sources of energy.

## 2. Patterns of Top Management

The National Power Corporation is part of the government machinery for the development of energy. As such, the quality of the people who manage the enterprise is a major factor in determining its success (or failure) in achieving the goals, missions, or objectives discussed in part one.

The top management of NPC was analyzed in terms of their composition, process of appointment and sources. From its organizational chart and charter primary data were extracted and subsequently supported by interviews.

a. Composition of Top Management

There are seven (7) members of the National Power Board, including the Chairman and the Ex-officio Vice-Chairman who is (also the General Manager). Currently, the Chairman of the Board is the Secretary of the Department of Industry, whose department (now ministry) activities are largely related to the industrialization program of the country. Other current members include the Secretary of Public Works and Telecommunications; Administrator of the National Electrification Administration; head of the Energy Development Board, a representative from the office of the President; and another from the private sector.

The board members, with the exception of the General Manager, are generally appointed by the President on a part-time basis. Most, if not all, are employed full time in their respective departments (ministries) or agencies. Furthermore, the appointment of heads of departments and other line agencies serves to influence the planning process of the enterprise in support to the National Government Policies on Energy development. Their appointment to the board by the President also provides the required structural linkages between departments and corporations and among corporations since board members of a corporation are at the same time board members of other enterprises.

The General Manager of NPC is appointed by the Board on a full time basis. He is also the Ex-Officio Vice-Chairman of the Board.

b. Process of Appointment

Prior to the Martial Law period, the appointment of top management personnel had been a tedious process. Recommendations came from the Philippine Congress which had to be approved by the President. The Commission on Appointments approved the appointments of recommendees. Presently, appointments are made directly by the President. This is not only true for NPC, but for all government corporations, except those where government holds only majority of stocks. The stockholders of the corporations elect their board members who in turn appoint the president and general manager.

Following is a profile of the top management of the National Power Corporation.



BOARD OF DIRECTORS

- o Composition : Chairman  
Ex-Officio Vice-Chairman (also the General Manager)  
Five (5) Board Members
- o Process of Appointment : All, with the exception of the Vice-Chairman, are appointed by the President of the Philippines (RA 6395, as Amended by PD 390, 758 and 938).
- o Term of Appointment : Three (3) years
- o Qualification: Duly licensed professional of recognized competence in engineering, business management and finance or in law, particularly in fields of corporate practice, with at least 10 years actual practice in their fields of expertise.
- o Manner of Suspension : Any member of the Board may be suspended or removed from office by the President of the Philippines
- o Limitation : Unless authorized by the President of the Philippines, the Chairman or Board Member of the Corporation shall, at no time, serve in the Corporation in any capacity whatsoever other than Chairman or a member thereof.
- o Powers and Duties : Formulate and adopt policies and measures for the management and operation of the Corporation.  
  
Adopt annual supplemental budget of receipts and expenditures for the Corporation according to its requirements.  
  
Organize, reorganize the corporate staffing pattern and the number of personnel for their salaries, define their powers and duties subject to approval of higher authorities.  
  
Appoint and fix the compensation of the General Manager, Assistant General Manager, Department and Regional Chiefs (Managers).  
  
Suspend or remove the General Manager by a majority vote of all members.  
  
Adopt and set guidelines for employment of personnel on the basis of merit, ethical competence and moral character.

### GENERAL MANAGER

- o Manner or Appointment : Appointed by the Board of Directors.
- o Manner of Suspension : Majority vote of the Board of Directors subject to approval of the President of the Philippines.
- o Powers and Duties : Direct and manage the affairs and business of the Corporation on behalf of the Board of Directors.

Submit at the end of each fiscal year an annual report through the Board of Directors.

Sit in all meetings of the Board and participate in all deliberations but without power to vote.

Perform such other functions as may be assigned to him by the Board.

Appoint and fix the number and salaries of subordinate personnel subject to Board approval.

Remove, suspend or discipline any subordinate employee of the Corporation.

### 3. Sources of Top Management

Much of the top management personnel of NPC throughout its 40-years life of corporate existence originated from the government and the business-industrial sectors. Most of the board members come from the civil service by legal requirement of the Civil Service Commission. The general managers are mostly from the business-industrial sector.

## B. PRODUCTION MANAGEMENT

### Objectives

The main production objective of the National Power Corporation is power generation and transmission to end users. Commonwealth Act No. 120, Revised Republic Act No. 5395 and subsequent Presidential Decrees have identified the following as its major production guidelines.

- o To undertake a complete survey of national power resources (water geothermal, oil, etc), to determine the comparative value of the different resources of power and select power sites capable of economical development.
- o To study and evaluate current and future power requirements of both general and industrial users.
- o To prepare a comprehensive long range program for development of all power resources and undertake the construction of such projects as may be required in the program.

Guided thus, the NPC production management performs the following specific functions:

- o Directing and coordinating the engineering activities involved in the planning, design and construction schemes of the enterprise.
- o Reviewing, coordinating and programming the systems and project development studies required in the investigation of project sites, generation and transmission facilities.
- o Directing, planning and coordinating designs (civil, architectural, electrical and mechanical) of physical facilities of the program.
- o Preparing partial and full reports on project developments for monitoring purposes.
- o Planning, directing and carrying out operations of power resources relative to exploration development and production.
- o Coordinating and controlling all activities in construction of physical facilities and cost estimates of proposed projects.

# 1. Production Organizational Structure and Controls

## a. Organizational Structure and Controls

The General Manager, assisted by the Corporate Planning Staff and Safety and Civil Security Office, authorizes and approves all studies by the departments and regional offices engaged in production. He is empowered by CA 120 and Revised RA 6395 to award contracts to contractors subject to the approval of the Board. Moreover, he may purchase orders of equipment, materials and services and approve the disposal of unserviceable equipment and materials by sale through biddings.

Under his supervision are the managers of the Engineering and Construction Departments, the Special Projects Group and the three (3) Regional Offices around the country. The managers are empowered to prepare pre-qualifications of bidders, and review cost estimates and maintenance expenses of current generating and transmission facilities.

Under each manager are the division heads and section chiefs, who perform functions which are indicated in the production organizational chart and the work table presented in the last portion of this section.

The tasks of the departments and regional offices are be described as:

### o Engineering and Construction Department

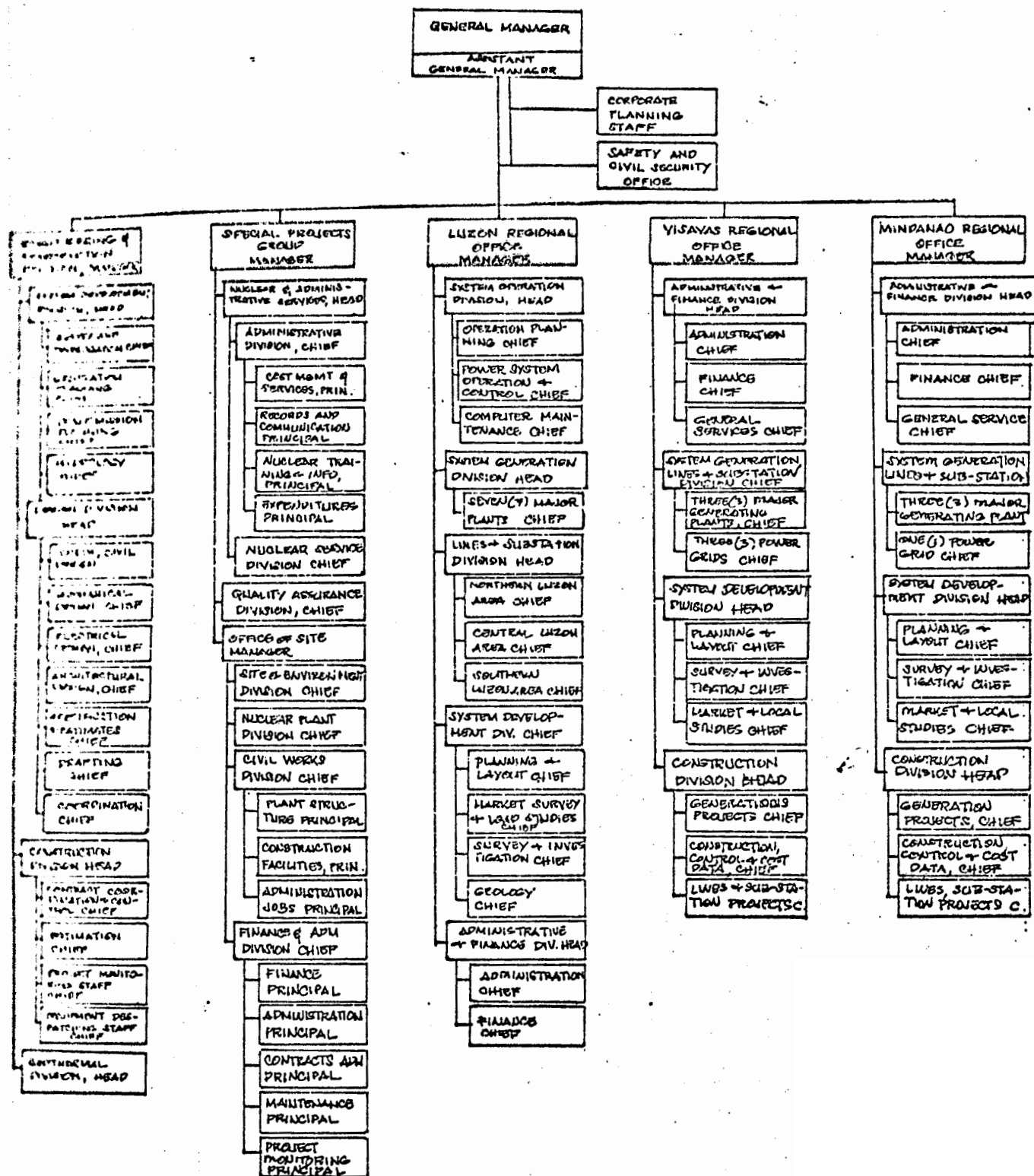
The Engineering and Construction Department (ECD) coordinates and directs all engineering activities in planning, design, construction and operation of hydro, thermal and geothermal plants and transmission facilities of the Corporation. It is assisted and supervised by the Department of Public Works and Telecommunications. The ECD manages and provides all support activities to the three Regional Offices. These support activities include assistance in accomplishing economic feasibility studies, site investigation (reconnaissance) work, design and planning of facilities, construction, and management of existing generation and transmission facilities of the Corporation.

### o Regional Offices

The NPC has three Regional Offices serving the geographical subdivisions of Luzon, Visayas and Mindanao. Organizationally, it has been set up in the same fashion as the main office and ECD. Each has administrative and finance units to support all of its production divisions which are: System (Generation and Transmission) Operation and System Development (Surveys, Planning and Design) Construction.

o Special Projects Group

The Special Projects Group, also a department, is a recent innovation in the organization all set up of the Corporation. It was created to handle the task of finding alternative energy sources. Its functions include the determination of the economic and technical profitability of establishing nuclear generating plants in the country, identification of funding sources, plant design and construction and management. Much of its technical capability still has to be developed since nuclear energy technology is quite new to the country.



NATIONAL POWER CORPORATION  
PRODUCTION ORGANIZATIONAL CHART

NATIONAL POWER CORPORATION  
WORK TABLE OF  
PRODUCTION UNITS

| UNIT  | TASKS  |
|---|--|
| 1. <u>Engineering and Construction</u><br><u>Department</u> | Coordinates and directs all engineering activities involved in planning, design and construction of new hydro, thermal and geothermal generating and transmission facilities of the corporation. |
|   | Manages the operation of on-going hydro, thermal and geothermal and transmission facilities of the corporation.  |
|   | Provides the Regional Offices support activities in the implementation of new projects and maintenance of on-going facilities.   |
|   | Monitors project status to top management (Board and General Manager).   |
| a. System Development<br>Division                           | Responsible for assisting the Regional Offices in conducting site surveys or investigation of prospective hydro, thermal and geothermal plants and transmission facilities.                      |
|   | Provides the Regional Offices with technical expertise in generation and transmission planning.  |
|   | Assists the Regional Office in conducting hydrology site tests.  |
| b. Design Division  | Assists the Regional Offices in preparing civil, mechanical, electrical and architectural designs of plants and transmission facilities.   |
| c. Construction Division                                    | Coordinates and controls contracts bidden and awarded to local and foreign contractors.  |

| UNIT  | TASKS   |
|---|---|
|   | Assists the Regional Offices in estimating capital outlay and maintenance expenses of new and current projects.   |
|   | Monitors for top management the status of new and current projects.   |
|   | Dispatches from the main office equipment necessary in projects.  |
| d. Geothermal Division                                    | Responsible for the planning, design, construction and management of geothermal plants around the country. This task is not delegated to the Regional Offices.  |
| 2. <u>Special Projects Group</u>                          | The group is mainly responsible for nuclear energy generation in the country. It is the production unit responsible for site selection, planning and design, construction and management of future nuclear plants in the country.                               |
| a. Nuclear and Administrative Services                    | Provides cost management and management information services for top management on the nuclear development projects of the Corporation. Also responsible for the training of technical personnel who will eventually operate the nuclear generating facilities. |
|   | Manages quality assurance of nuclear facilities (e.g. nuclear wastes, ect.)   |
| b. Office of the Site Manager                             | Responsible for providing technical expertise in site selection, plant design, construction and management.   |
| 3. <u>Regional Offices (Luzon, Visayas, and Mindanao)</u> | The three Regional Offices around the country are responsible for implementing the national hydro, thermal and geothermal program in their respective geographical areas.   |



---

UNIT

---

T A S K S

---

Coordinates and directs all engineering activities involved in the planning, design and construction of new plants and transmission facilities.

Operates energy production of existing hydro, thermal and geothermal plants and transmission facilities.

Monitors all project status to top management through the Engineering and Construction Department at the main office.

## 2. Operations

The actual production operations of the corporation has to be viewed on a national perspective where the external agencies, Energy Development Board and Department of Public Works and Telecommunications, participate in laying out the energy development program for the country.

The Energy Development Board in consultation with the Corporation and the Department of Public Works usually accomplishes a medium (5-year) range energy program for the country, based on the national economic development plan instituted by the National Economic and Development Authority (NEDA). Targets, in terms of electricity generated and transmitted to bulk users, are therefore set within this medium range plan. Taking into consideration all inputs available, especially local and foreign funds and technical manpower, the Corporation then devises a year-to-year program of engineering activities to operationalize the total program set by the Energy Development Board.

The Department of Public Works and Telecommunications provides assistance during the planning phase of the program, as well as supervises, providing equipment and services, the actual construction of new facilities. Upon completion of the new facilities its supervisory role subsides, and the actual management of the generation and transmission of electricity becomes the major responsibility of the corporation.

### a. New Facilities

The Annual program of engineering activities for constructing new generation plants and transmission facilities consists of sets of new projects which follow a set pattern of stages. These include:

#### 1) Feasibility Studies

Economic feasibility studies are accomplished to determine the liability of each project in terms of financial, economic and social (externalities) profitabilities. Also, funding sources and cost scheduling are provided in these studies. Much of the expertise in this area resides in the corporation. The Corporate Planning Staff is mainly responsible for this activity.

The technical counterpart of the studies are undertaken by the Engineering and Construction Department, the Regional Offices and the Special Projects Group. Guided by the National Energy Development Program and market surveys in their geographical areas, the Regional Offices, assisted by the Engineering and Construction Department, complete the site investigation (hydrological and geological tests, transport and distribution studies, etc.), the plant design

and its corresponding cost estimates (capital outlay and maintenance), and the training component for technical personnel who will operate the plants when completed. These are later consolidated and reviewed by the Engineering and Construction Department and the Corporate Planning Staff before submission to the General Manager and the Board. The Energy Development Board makes the final approval.

## 2) Funding

After final approval, funding sources are tapped by top management for the implementation of the project. In most cases, technical studies of projects are further refined by the Corporation with the assistance of in-house external consultants either local or foreign after acquiring credit lines from funding sources.

## 3) Construction

Actual construction of new hydro, thermal and geothermal plants and transmission facilities are not available within the corporation or from the Department of Public Works and Telecommunications.

On-going construction of new generating plants and transmission facilities at the end of 1975 were:

### GENERATING PLANTS

|                    | Phil.<br>Plants | Inst.<br>Capacity<br>(MW) | Luzon<br>Plants | Inst.<br>Cap.<br>(MW) | Visayas<br>Plants | Inst.<br>Capt.<br>(MW) | Mindanao<br>Plants | Inst.<br>Cap.<br>(MW) |
|--------------------|-----------------|---------------------------|-----------------|-----------------------|-------------------|------------------------|--------------------|-----------------------|
| Hydroelec-<br>tric | 3               | 330                       | 1               | 100                   | -                 | -                      | 2                  | 230                   |
| Steam              | 1               | 150                       | 1               | 150                   | -                 | -                      | -                  | -                     |
| Diesel             | 3               | 75                        | -               | -                     | 2                 | 62                     | 1                  | 11                    |
| Geothermal         | 2               | 110                       | 2               | 110                   | -                 | -                      | -                  | -                     |

### TRANSMISSION PLANTS

|                  | Philippines | Luzon | Visayas | Mindanao |
|------------------|-------------|-------|---------|----------|
| Lines            | 1,166       | 853   | -       | 313      |
| Substation (MVA) | 590         | 200   | -       | 390      |

Nuclear generation plants construction is very recent in the country. Plans for utilizing nuclear energy in the Philippines were started only in 1973. Only in 1975 did the Special Projects Group complete the economic and technical reports required for the acquisition of loans from foreign sources. Even then, much of the expertise employed was provided by consultants from the United States and Western Europe.

b. Existing Plants and Facilities

The management of generating plants and transmission facilities is a major responsibility of the General Manager. Assisting him in this area are the managers of the Engineering and Construction Department and the Regional Offices where the plants and facilities are situated.

The tasks of the Engineering and Construction Department are mainly to provide the Regional Offices with adequate support materials as well as monitor the on-going activities of the Regional Offices in operating the plants and facilities.

The Regional Offices operate the plants and facilities based on production guidelines and safety rules provided by the Engineering and Construction Department and Safety and Civil Security Office (General Manager's Office).

The following tables show the status of the Corporate generating plants and transmission facilities as of the end of 1975:

NATIONAL POWER CORPORATION  
GENERATION PLANTS  
1975

| <u>LUZON</u>                  | Installed Capacity<br>(KW) |
|-------------------------------|----------------------------|
| (7) Hydroelectric Plants      |                            |
| - Ambuclao                    | 75,000                     |
| - Angat                       | 212,000                    |
| - Binga                       | 100,000                    |
| - Caliraya                    | 32,000                     |
| - Buhi-Barit No. 1            | 1,800                      |
| - Cawayan                     | 400                        |
| - Balongbong                  | 200                        |
| (1) Thermal Plant             |                            |
| - Bataan Thermal Plant No. 1  | 75,000                     |
| (1) Diesel-Electric Plant     |                            |
| - Ligao Diesel-Electric Plant | <u>300</u>                 |
| TOTAL: LUZON                  | 496,700                    |
| <br><u>VISAYAS</u>            |                            |
| (2) Hydroelectric Plants      |                            |
| - Loboc River                 | 1,200                      |
| - Amlan River                 | <u>800</u>                 |
| TOTAL; VISAYAS                | 2,000                      |
| <br><u>MINDANAO</u>           |                            |
| (2) Hydroelectric Plants      |                            |
| - Maria Cristina Falls        | 150,000                    |
| - Agusan River                | <u>1,200</u>               |
| TOTAL: MINDANAO               | 151,200                    |
| TOTAL: PHILIPPINES            | <u><u>649,900</u></u>      |

SOURCE: National Power Corporation

NATIONAL POWER CORPORATION  
TRANSMISSION FACILITIES  
1975

LUZON GRID

| Area           | Sub-Area     | Coverage  |
|----------------|--------------|---|
| Northern Luzon | Laoag        | Ilocos Norte, Ilocos Sur, Abra                    |
|                | San Fernando | La Union and Pangasinan                           |
| Central Luzon  | Beckel       | Benguet   |
|                | Mexico       | Tarlac and Pampanga                               |
|                | Olongapo     | Bataan and Zambales                               |
|                | Cabanatuan   | Nueva Ecija                                       |
|                | Balintawak   | Bulacan and MECO supply                           |
| Bicol Region * | Calamba      | Cavite, Laguna and Batangas                       |
|                | Buhi         | Camarines Sur, Albay,<br>Sorsogon and Catanduanes |

Length:      3,268 Km

VISAYAS GRIDS

Cebu Electrical Power Grid  
Negros Electrical Power Grid  
Bohol Electrical Power Grid  
Panay Electrical Power Grid

Length:      98 Km

MINDANAO GRID

| Generating Source | Distribution Source | Area                                     |
|-------------------|---------------------|--|
| Ma. Cristina HE   | MC Switchyard       | Iligan & Marawi                          |
| Agusan River HE   | Overton Subs.       | Lanao Norte and<br>Iligan City           |
| Talomo River HE** | Laguiran Subs.      | Agus No. 2 and Lake<br>Lanao Shore towns |
|                   | Carmen Subs.        | Cagayan de Oro                           |
|                   | Kiwalan Subs.       | Lugait & Iligan                          |
|                   | Moresco Subs.       | Moresco Franchise                        |
|                   | Marawi Subs.        | Marawi City                              |

Length:      188 Km

TOTAL: PHILIPPINES      3,554 Km

SOURCE: National Power Corp.

\* not yet connected with Luzon Grid

\*\* isolated

## C. FINANCIAL MANAGEMENT

### 1. Objectives

The financial operations of NPC are handled mainly by its Treasury and Accounting Departments, two of the main line units of the enterprise directly managed by the General Manager. The combined specific objectives of the two departments to support the development and generation of energy of NPC include the following:

- o Assist the top management in budget preparation and long term financial projections of the corporation;
- o Accomplish financial studies (with departments involved in production and the Corporate Planning Staff) necessary in acquiring loans from external and local sources;
- o Coordinate, supervise and control the corporate general accounting procedures and policies on:
  - Account receivables and payables
  - Fixed assets and insurance
  - Credit, collection and disbursement procedures and systems.

### 2. Organizational Structure and Controls

The General Manager is assisted by the Internal Control Department and Corporate Planning Staff in planning and implementing the internal financial audit programs (systems and controls) covering the operations of the Treasury and Accounting Departments. Moreover, the Staff of these departments are responsible for designing and operationalizing the financial information system for utilization of top management. Thus the authority of the General Manager over the two operating units is direct and pervasive.

#### a. Treasury Department

The Treasury Department, headed by a Manager, has three sub-components. These include the Loan Management and Foreign Exchange, Cash, and Property and Insurance Divisions.

The Loan Management and Foreign Exchange Division is responsible for detailed analyses of payments and servicing of external and local loans. Furthermore, it transmits records of drawdowns, closing dates and repayments of outstanding loans to the General Manager.

The Cash Division performs the functions of directing and administering all accounts receivables and payables of the corporation. It is also responsible for providing adequate internal controls (internal to the division) on all receipts and disbursements.

The Property and Insurance Division coordinates and directs the property and insurance activities of the corporation. Its operations consist mainly of receiving, handling and distributing stocks of intermediary materials to all NPC facilities in the country. Furthermore, it services the insurance requirements of the corporate fixed assets and other facilities.

b. Accounting Department

Headed by a Manager who reports directly to the General Manager, the Accounting Department has the primary task of recording all financial transactions and preparing all financial statements and other reports for top management. It also assists the Corporate Planning Staff of the General Manager in budget preparation, investment analysis and other long-term financial projections.

The department is sub-divided into four sub-units, namely Financial Analysis and Budget, General Accounting, Data Processing, and Fixed Assets Stocks and Inventory Business.

The Financial Analysis and Budget Division Assists the Corporate Planning Staff in recommending appropriate decisions on budget, investments and long-term financial programs to the General Manager.

The General Accounting Division is responsible for the operation and control of the general accounting systems which include receivables stock records, payroll and voucher preparations for accounts payables.

The Data Processing Division has a complimentary task of certifying and updating financial statements and other reports required as inputs in the Management Information System of the Corporation.

Finally, the Fixed Assets, Stocks and Inventory Division is responsible for the proper accounting and cost classifications of fixed assets by cost centers (NPC Plants, Offices and other facilities) including technical descriptions of all property units. It also controls all capital expenditures through a Work Coder System and proper accounting of stock accounts.

3. Financial Operations

As broadly discussed earlier, the General Manager supervises the financial operations of the two departments. He is assisted by the Internal Control Staff in planning and implementing internal



audit programs covering the accounting and financial activities of the enterprise. The Internal Control Staff also operationalizes internal safeguards on disbursements of all kinds.

Some of the specific tasks of the Internal Control Staff are:

- o Assisting top management by reviewing the adequacy (or performance) of on-going accounting and financial controls.
- o Conducting audits on income, expenditures, corporate assets and investments.
- o Performing functions not ordinarily covered by regular audit such as defalsifications and frauds and losses in coordination with the commission on audit.
- o Installing, implementing and monitoring the system of internal control on disbursements of all kinds.

The financial operations of NPC have been arbitrarily categorized on the basis of the three main objectives of the treasury and accounting departments. The sub-divisions show how the two units interface in pursuing their shared objectives. Furthermore, it reflects the interlinkages of the top management and other line departments of the enterprise, as well as the national agencies regulating its operations.

a. Assisting the General Manager in Budget Preparation and Long-Term Financial Projections

The sequence of preparing annual budgets can be described as follows:

- 1) Prior to the Fiscal Year, the Budget Commission requests NPC to prepare the budget for its evaluation and approval.
- 2) The General Manager mobilizes his Corporate Planning Staff (CPS) to complete an initial draft of the budget based on:
  - o Program guidelines set by the Energy Development Board
  - o Short-term (1 to 2 years) engineering and construction plans of the Engineering and Construction Department, Special Projects Group, and Regional Offices.
  - o Available funds and credit lines from loan sources for the fiscal year.
- 3) The CPS requests the Treasury and Accounting Departments for Financial analyses and projections for the covering year based on projected

inflow (internally-generated revenues, equity contributions, cash advances from the National Government, drawdowns from foreign and local loans, supplies credit and others) and outflow of funds (construction and developments programs, project site investigations and studies, debt service obligations, working capital and other expenditures requirements).

- 4) The CPS and the two Departments then consolidate the financial reports into a preliminary draft of the budget.
- 5) Required refinements of the budget are undertaken after an initial evaluation of the General Manager is completed.
- 6) The final output approved by the General Manager is then submitted to the Budget Commission for evaluation and approval.

b. Accomplishing Financial Studies for Loan Acquisitions

Much of the tasks of the two Departments on NPC loan applications involve determining the financial profitability of new investments of the enterprise. In particular, the Loan Management and Foreign Exchange Section of the Treasury Department undertakes cash flow analyses of projects recommended to the General Manager by the Engineering and Construction Department, Special Projects Group, and the Regional Offices. The CPS evaluates and approves such studies prior to submission and final approval of the General Manager. The General Manager, acting for the corporation, then enters a loan agreement with foreign sources subject to Central Bank regulations.

The following is a summary of foreign loans contracted by NPC in the 1957-75 period to implement its facilities development program.

NPC FOREIGN LOANS  
(1971-1975)

| YEAR | SOURCE  | AMOUNT<br>(000) | INTEREST<br>(%)                             | APPLICATION       |
|------|---|-----------------|---|-------------------|
| 1971 | Asian Development Bank                                      | \$23,000        | 7½  | Maria Cristina    |
| 1972 | Asian Development Bank                                      | 21,000          | 7½  | Agusan II         |
|      | International Bank for<br>Reconstruction and<br>Development | 22,000          | 7½  | Bataan Thermal #2 |
|      | International Development<br>Associates                     | 10,000          | 7½  | Bataan Thermal #2 |
| 1973 | United States Agency<br>for International<br>Development    | 3,072           | 2%, 1st<br>10 years<br>3%, next<br>20 years | Tiwi              |
| 1974 | Asian Development<br>Bank                                   | 1,000           | 8½  | Agusan II         |
|      | Development Bank of<br>the Philippines -<br>Mitsui          | 6,251           | 7½  | Tiwi              |
|      | International Bank<br>for Reconstruction<br>and Development | 61,000          | 7½  | Pantabangan       |
| 1974 | Banque de Paris<br>des Pays-Bos                             | 5,407           | 7½  | Visayas/Mindanao  |
|      | OECD (Japan)  | 17,546          | -   | Cagayan           |
|      | Interbanca per<br>Financementi                              | 45,666          | 6½  | Tiwi/Los Baños    |

| YEAR | SOURCE                     | AMOUNT<br>(000) | INTEREST<br>(%) | APPLICATION       |
|------|----------------------------|-----------------|-----------------|-------------------|
|      | Mitsubishi <sup>1/</sup>   | 1,467           | -               | Tiwi              |
|      | Mitsubishi <sup>1/</sup>   | 13,709          | -               | Tiwi              |
|      | Mitsui & Co. <sup>1/</sup> | 16,873          | -               | Tiwi              |
| 1975 | Asian Development Bank     | 22,700          | 8 3/4           | Maria Cristina    |
|      | Uzinexport                 | 13,230          | 3½              | Cebu Coal/Thermal |
|      | Banque de Paris            | 165,122         | 7½              | Visayas/Mindanao  |
|      | Exenibank (Japan)          | 9,677           | -               | Agusan II         |
|      | Mitsubishi <sup>1/</sup>   | 27,540          | -               | Tiwi              |
|      | Mitsui & Co. <sup>1/</sup> | 28,912          | -               | Tiwi              |
|      | Lahmeyer <sup>2/</sup>     | <u>2,145</u>    | -               | Agusan IV/V       |
|      | T o t a l                  | 516,217         |                 |                   |

During the same period (1971-75), NPC obtained some P265 M to provide the Philippine counterpart of the foreign loans. Part of the local loans were also utilized in funding projects which were not financed by foreign sources.

---

Source: National Power Corporation

<sup>1/</sup> Equipment

<sup>2/</sup> Services

NPC LOCAL LOANS

(1971 - 1975)

| SOURCES                           | AMOUNT<br>(000)  | INTEREST<br>(%) |
|-----------------------------------|------------------|-----------------|
| Mortgages                         | P 3,151          | 7               |
| NPC Bonds Series                  | 192,750          | 4-7             |
| Philippine Government             | 5,672            | -               |
| Reparations Commission            | 54,809           | -               |
| Utilities Development Corporation | 8,971            | N.A.            |
|                                   | <hr/>            |                 |
| T O T A L                         | <u>P 265,353</u> |                 |

---

Source: National Power Corporation

c. Operating the Corporate General Accounting System and Policies

The Treasury and Accounting Departments complement each other in operating the general accounting system and executing its policies regarding financial transactions. The General Manager and his Internal Control Staff (Corporate Auditor, in particular) usually enters the scene during the later phase of the transactions when he (or a representative) affixes his signature on the check, which then goes to the corporate auditor.

Some of the standard procedures and controls observed by both departments in processing the financial documents are as follows:

- 1) Incoming Documents (Debit Notes, Inward Bills, Commercial Invoices, Consular Invoices, Certificates of Origin, Bills of Lading, Insurance Policy, Packing List).

These types of documents are received by the Manager, Treasury Department, who transmits them to the Loan and Management Division for verification and evaluation. After providing recommendatory action to departments concerned, the division sends the documents to the Administration Department for production. The Department reproduces copies of the completed documents and forwards them to the Division, retaining a set of copies for its file. The Division then sends

the copies to the Accounting Department and Property and Insurance Division of the same department for proper action after recording and retaining a set of copies of documents.

## 2) General Voucher and Cash Disbursement

Vouchers are prepared with supporting documents by cost center heads of the enterprise. The completed documents are transmitted to the Accounting Department Manager who then refers them to both the Financial Analysis and Budget and General Accounting. The former records the documents and the later verifies the accounting codes of the documents.

The documents are subsequently sent to the General Manager or Treasury Department Manager for signature, and transmitted to the Corporate Auditor (Internal Control Staff) for evaluation. After that, the check is prepared by the Treasury Department upon receipt of the audited documents from the Corporate Auditor, and transmitted back to Accounting Department for recording. After entry into the company books, the check follows the same route mentioned above, (except for the cost centers) until it is released by the Treasury Office.

## 3) Collection of Delinquent Accounts

Accounts of this kind are received and processed in the Cash Division. The main output of the Division are disconnection or collection letters, later transmitted to the Treasury Department Manager who sends the letter to power consumers.

## 4) Documents Involving Withdrawals from Loans and Treasury Funds

- o Letters of Credit (Indent Orders, Supply and Consulting Services)
- o Request for Direct Payments from Loan Fund

The Treasury Department Manager receives the application documents from Cost Centers and transmits them to the Loan Management and Foreign Exchange Division where they are assigned to a loan Officer who evaluates and records the application. Attendant documents like formal letters of credit (or increase in the amount or changes in terms) and requests for direct payment from loan funds are prepared under the Loan Officer and approved by the Treasury Department Manager.

The documents are subsequently received by the Assistant General Manager for submission to the General Manager. After approval, they are passed on to the Corporate Auditor for evaluation. The audited documents are sent back to the Loan Management and Foreign Exchange Division where requests for

fund support to the Bureau of Treasury (Department of Finance, Republic of the Philippines) are prepared.

The requests are signed by the Treasury Department Manager and forwarded back to Loan Management and Foreign Exchange Division which transmits them to the Bureau of Treasury and finally, to the corporate bank for fund release.

#### 4. Summary of Conclusions on Financial Management

The NPC top management views structure and controls as a primary tool for achieving internal efficiency in all of its sub-operations. Hence the Treasury and Accounting Departments' organizational set-up, in relation to the General Manager and other operating departments, was designed to achieve a degree of centralization. The apex of the set up is the office of the General Manager. Likewise, each department has been organized to effect a hierarchical structure with the Manager on top.

The General Manager's control over financial operations is performed for him by the Corporate Planning and Internal Control Staffs. The Corporate Planning Staff's main function is coordinating and participating in the completion of the annual budget which should reflect the actual programs of the coming year. Furthermore, it evaluates and approves all financial studies of the Treasury Department for new investments prior to submission to the General Manager. The Internal Control Staff mainly audits transactions involving cash disbursements and withdrawals from loans and treasury funds.

During the period 1971-75, top management has concentrated much of its efforts to acquiring foreign loans which totalled US\$50.16 M, for its long-term funding requirements. Local counterpart funds, valued at P265.3 M, were raised through bond flotations and loans from the Philippine Government. Cash outflows were allocated primarily for the development of new generating facilities and expansion transmission facilities, which are designed to eventually effect total Philippine electrification.

The Capital structure of the Corporation during the first four years of analysis (1971-74) was rather conservative. On the average, the following are the percentage shares of the items under Assets and Liabilities.

#### AVERAGE PERCENTAGE SHARES OF ITEMS OF ASSETS AND LIABILITIES

| <u>Assets and Other Credits</u>  | <u>%</u>     |
|----------------------------------|--------------|
| Total Utility Plants             | 82           |
| Other Properties and Investments | 5            |
| Current and Accrued Assets       | 12           |
| Deferred Debts                   | 1            |
|                                  | <u>100 %</u> |



| <u>Liabilities and other Debits</u> | <u>%</u>    |
|-------------------------------------|-------------|
| Proprietary Accounts                | 55          |
| Long-Term Debts                     |             |
| Local Loans                         | 16          |
| Foreign Loans                       | 22          |
| Current and Accrued                 |             |
| Liabilities                         | 35          |
| Deferred Credits                    |             |
| Suspense Account                    |             |
| Inventories                         | <u>2</u>    |
|                                     | <u>100%</u> |

Increases in total assets and liabilities during the period averaged only at P171 M or 12%.

Fiscal year 1974-1975 was a banner year. Assets and Liabilities grew to P3,182M--107% more than the 1974 level. Shares of components of assets and liabilities had also altered significantly as follows:

PERCENTAGE SHARES OF ITEMS  
OF ASSETS AND LIABILITIES  
1975

| <u>Assets and Other Debits</u> | <u>%</u>    |
|--------------------------------|-------------|
| Total Utility Plants           | 73          |
| Other Properties and           |             |
| Investments                    | 1           |
| Current and Accrued            |             |
| Assets                         | 22          |
| Deferred Debits                | <u>4</u>    |
|                                | <u>100%</u> |

| <u>Liabilities and Other Credits</u> | <u>%</u>    |
|--------------------------------------|-------------|
| Proprietary Accounts                 | 63          |
| Long-Term Debts                      |             |
| Local Loans                          | 3           |
| Foreign Loans                        | 26          |
| Current and Accrued                  |             |
| Liabilities                          | 3           |
| Deferred Credits                     | 5           |
| Suspense Account                     |             |
| Inventories                          | <u>-</u>    |
|                                      | <u>100%</u> |

Below is a summary of the Corporation's Annual Balance Sheet during the period of analysis (1971-1975) reflecting primarily the change in capital structure in 1975.

NATIONAL POWER CORPORATION  
ANNUAL BALANCE SHEET  
1971 - 1975  
(IN MILLION PESOS)

| Items/Year                           | 1971         | 1972         | 1973         | 1974         | 1975         |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|
| <u>Assets and Other Debits</u>       |              |              |              |              |              |
| Total Utility Plant                  | 836          | 854          | 1,139        | 1,244        | 2,310        |
| Other Properties and Investments     | 53           | 56           | 54           | 59           | 42           |
| Current and Accrued Assets           | 121          | 119          | 127          | 200          | 722          |
| Deferred Debits                      | <u>11</u>    | <u>14</u>    | <u>21</u>    | <u>32</u>    | <u>108</u>   |
|                                      | <u>1,021</u> | <u>1,043</u> | <u>1,342</u> | <u>1,535</u> | <u>3,182</u> |
| <u>Liabilities and Other Credits</u> |              |              |              |              |              |
| Proprietary Accounts                 | 562          | 582          | 659          | 956          | 1,995        |
| Long-Term Debts                      |              |              |              |              |              |
| Local Loans                          | 189          | 206          | 251          | 89           | 97           |
| Foreign Loans                        | 179          | 190          | 366          | 375          | 825          |
| Current and Accrued Liabilities      | 67           | 41           | 40           | 87           | 100          |
| Deferred Credits                     | 24           | 24           | 26           | 28           | 160          |
| Suspense Accounts                    |              |              |              |              |              |
| Inventories                          | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>5</u>     |
| T O T A L                            | <u>1,021</u> | <u>1,043</u> | <u>1,342</u> | <u>1,535</u> | <u>3,182</u> |
| Annual Increase (in Million Pesos)   |              | 22           | 299          | 193          | 1,647        |
| Annual Percentage Increase (%)       |              | 2.2          | 19.1         | 14.4         | 107.3        |

Source: National Power Corporation

The table below indicates income (profit) performance for the period. In 1971, it realized a profit of P37 M, P63 M in 1972, P62 M in 1973 and P68 M in 1974.

NATIONAL POWER CORPORATION  
COMPARATIVE PROFIT AND LOSS STATEMENT  
1971 - 1975  
(IN THOUSAND PESOS)

| Item/Year          | 1971                 | 1972                 | 1973                 | 1974                 | 1975                  |
|--------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|
| Utility Operating  |                      |                      |                      |                      |                       |
| Income             | 60,941               | 90,849               | 113,156              | 191,111              | 237,380               |
| Operating Expenses | <u>43,382</u>        | <u>(49,534)</u>      | <u>(66,885)</u>      | <u>(95,834)</u>      | <u>(136,188)</u>      |
| Operating Income   | 17,559               | 41,315               | 46,271               | 95,277               | 101,192               |
| Revenue from       |                      |                      |                      |                      |                       |
| Leased Plant       | -                    | -                    | 490                  | 686                  | 780                   |
| Expense of         |                      |                      |                      |                      |                       |
| Leased Plant       | -                    | (49)                 | (83)                 | (18)                 | (28)                  |
| Purchased Power    |                      |                      |                      |                      |                       |
| Interchange        | 15,824               | 16,176               | 9,971                | 34,773               | 16,307                |
| Depreciation of    |                      |                      |                      |                      |                       |
| Leased Plants      | <u>-</u>             | <u>-</u>             | <u>(287)</u>         | <u>(277)</u>         | <u>(671)</u>          |
| Total Operating    | 33,383               | 57,442               | 56,362               | 60,892               | 117,580               |
| Other Income       | <u>3,474</u>         | <u>5,807</u>         | <u>5,951</u>         | <u>7,155</u>         | <u>10,801</u>         |
| TOTAL INCOME       | <u><u>36,857</u></u> | <u><u>63,299</u></u> | <u><u>62,313</u></u> | <u><u>68,050</u></u> | <u><u>128,381</u></u> |

Source: National Power Corporation

## MATERIALS MANAGEMENT

### 1. Objectives

The Materials Management Section of this part is an extension of our discussion on production operations. Its tasks include materials procurement, handling and subsequent distribution to production units. These tasks are performed jointly by the Administrative and Treasury Departments whose managers report directly to the General Manager. The Materials Management Section performs the following:

- a. Schedule, procure and deliver materials requisitions of different production units of the corporation.
- b. Assist top management in implementing procurement policies and procedures of the corporation.
- c. Assist the top management in preparing the following:
  - 1) Requisition Orders (RO)
  - 2) Purchase Order Memos (POM)
  - 3) Purchase Orders (PO)
  - 4) Indent Orders (IO)
  - 5) Quotations on Local and Foreign Currencies
  - 6) Price Canvassses
  - 7) Transaction Papers
- d. Monitor information on updated inventory of materials and services.
- e. Implement inspection, handling and storage, distribution and accounting of corporate equipment, spare parts, construction materials, supplies and services.
- f. Assist top management in disposing of unserviceable equipment, materials and other supplies.

### 2. Organizational Structure and Controls

The Board formulates broad policies on procurement. These policies are transformed by the Corporate Planning Staff and Internal Control Department of the General Manager into systems and procedures which are implemented by the Administrative and Treasury Department.

External control by the national government of materials management is exercised by the Commission on Audit which regularly audits the procurement and distribution of materials.

### Administrative Department

The Procurement Division of the Administrative Department coordinates all activities related to procurement of equipment, materials and other supplies of the Corporation. Its major task includes the retrieval of orders from the production units and scheduling their purchase and delivery.

The division has three sections: the Purchasing Section, which undertakes the actual buying of equipment, materials and other supplies; the Procurement Services Section, which prepares transaction documents and records all transactions for top management; and the Procurement Analysis and Expediting Section, which consolidates and schedules orders from the production units. It also conducts price canvasses and other input analysis like product brands and standards.

### 3. Operations

The following are the specific systems and procedures governing materials management under the Administrative and Treasury Departments.

#### a. Administrative Department Procurement Division

##### 1) Preparation and Approval of Requisition Order (RO)

Clerical Assistant/  
Property Custodian

Determines items needed and not available in stock  
Prepares list of quantities and specifications  
Checks if funds are available  
Checks if tools or equipments are non-expendable items  
Checks if these items are included in the budget for General Plant Equipment

Prepare RO indicating the following:

- Requisitioning officer, address, designation
- Specification and classification
- Date when required and delivery point
- Justification for requisition
- Approving officer

Requisitioning Officer

Requires documents for review and signature

2) Preparation and Approval of Purchase Order Memo (POM)

|  |   |
|--|---|
| Buyer, Purchasing Section                    | Checks specifications of items and verifies if previous purchases have been made<br>Calls up supplier and verifies validity of prices and availability of stock<br>Accomplishes PO Memo for items previously purchased which are available in stock and prices still acceptable |
| Senior Buyer                                 | Checks if specifications complete and definite; affixes initials  |
| Purchasing Section Chief                     | Reviews and approves PO Memo  |
| Action Clerk, Purchasing                     | Assigns number, files and forwards  |
| Abstract Clerk, Procurement Services Section | Records   |
| Procurement Services                         | Checks if necessary information is indicated, names clerk who prepares PO   |
| Abstract Buyer                               | Forwards PO Memo to Clerk for preparation of corresponding PO   |

3) Preparation and processing of PO involving amounts over ₱5,000

|  |   |
|--|---|
| Purchase Order Clerk<br>Procurement Services Section | Receives duly approved quotations and pertinent documents<br>Examines papers, analyzes and reconciles the quantities and specifications of the items stated in the quotation<br>Accomplish PO in nine (9) copies. |
| Senior Procurement Clerk                             | Reviews PO as to correctness of Entries; affixes initials   |
| Action Clerk, Procurement Services Section           | Records details of PO   |
| Chief, Procurement Services Section                  | Reviews and checks if PO was properly prepared, affixes initials  |

|  |   |
|--|---|
| Action Clerk,<br>Procurement Services                      | Receives PO and forwards indicating date when PO was forwarded  |
| Head, Procurement<br>Division                              | Reviews PO and affixes initials   |
| Manager, Administration                                    | Reviews PO and affixes signature  |
| Budget Clerk, Financial<br>Analysis and Budget<br>Division | Records, checks proper account charges, verifies availability of funds, affixes initials  |
| Senior Budget Clerk  | Checks if costs are chargeable to Work Order or if items are for operation to Chief Budget Administration   |
| Chief, Budget Administration Section                       | Reviews charges, affixes initials   |
| Head, Financial Analysis<br>and Budget Division            | Reviews charges and affixes signature certifying availability of funds  |
| Budget Clerk   | Records outgoing PO, prepares log sheet addressed to Asst. Gen. Manager and Procurement Division  |
| Asst. Gen. Manager   | Reviews PO and affixes signature if amount is ₱50,000.00 and below; if over ₱50,000.00, affixes initials  |
| General Manager  | Reviews PO and affixes signature  |
| Action Clerk, Procurement Services Section                 | Acknowledges receipt Forwards copies to Property Section and Receiving, Shipping and Warehousing Section  |
| Buyer  | Serves PO to supplies requiring his signature and indicate date of receipt at the back of PO  |
| Action Clerk, Procurement Services Section                 | Records return of copies and distribute to the following: <ul style="list-style-type: none"> <li>o Procurement Division</li> <li>o Auditor (NPC-COA Office of Internal Control Department)</li> </ul> |

4) Preparation and Processing of Indent Orders (IO) involving amounts over P5,000

Indent Order, Procurement Services Section

Receives approved Abstract of Canvass and its supporting documents or quotations from exclusive distribution or representative of manufacturer or suppliers abroad.

Examines, analyzes and reconciles the quantities and specifications of items

Accomplishes IO in 18 copies following guidelines, policies, rules and regulations indicating complete and definite specifications of the items and all necessary requirements and conditions applicable to the transaction

Senior Procurement Clerk

Reviews IO as to correctness of the specifications of the items; affixes initials

Chief, Procurement Services Section

Reviews and checks if IO is properly prepared, affixes initials

Head, Procurement Division

Reviews Indent Order, affixes initials

Manager, Administration

Reviews IO, affixes his signature

Budget Clerk, Financial Analysis and Budget

Records, checks charges, verifies availability of funds; affixes initials and forwards to Senior Budget Clerk if costs are chargeable to Work Order or to the Chief Budget Adm. Section if items are for operations.



|  |  |
|--|--|
| Senior Budget Clerk                              | Checks if items are included in the estimate for the work order, records and affixes initials  |
| Chief, Budget Administration Section             | Reviews IO affixes initials  |
| Head, Financial Analysis and Budget Division     | Reviews charges and affixes his signature certifying the availability of funds for the transaction.  |
| Assistant General Manager                        | Reviews Indent Order, affixes his signature approving the transaction if the amount involved is P50,000.00 and below; if over P50,000.00 his initials.   |
| General Manager                                  | Reviews IO, and affixes his signature  |
| IO Clerk, Procurement Services Section           | Acknowledges receipt<br>Upon receipt of the authorization by the Inter-Agency Committee for the tax-free importation of the items, distributes copies as follows: <ul style="list-style-type: none"> <li>o Buyer</li> <li>o Property and Insurance Division</li> <li>o Internal Control</li> <li>o Advance Copy to supplier</li> </ul> |
| Buyer  | Serves IO to supplier requiring him to acknowledge receipt of the contract using the company's rubber stamp  |
| Indent Order Clerk, Procurement Services Section | Distribute newly returned and remaining copies as follows: <ul style="list-style-type: none"> <li>o Procurement Service Section</li> <li>o NPC COA Property Audit Department</li> <li>o Loan Management and Foreign Exchange Division</li> </ul>   |

5) Preparation of Status of Items in the PO

|  |   |
|--|---|
| Action Clerk or IO clerk,<br>Procurement Services<br>Section | Receives PO or IO returned due<br>to defective entries or<br>insufficiency of funds or<br>disapproved for one reason<br>or another  |
| Chief, Procurement<br>Services Section                       | Checks reasons for return, gives<br>instructions and writes the<br>information to be relayed to<br>the requisitioner  |
| Reconciliation Clerk   | Prepares feedback in 4 copies;<br>furnishes copies to Buyer in<br>charge of the items and<br>Regional Manager if requi-<br>sitioner is from the region;<br>affixes his initials |
| Senior Procurement Clerk                                     | Checks if the accomplishment of<br>the feedback is in order,<br>affixes his initials  |
| Chief, Procurement<br>Services Section                       | Reviews, affix initials   |
| Head, Procurement<br>Division                                | Reviews, affixes signature  |
| Action Clerk or IO Clerk                                     | Records and returns to Recon-<br>ciliation Clerk for filing<br>Prepares log sheet addressed to<br>requisitioner if from Manila<br>offices or to Records Section<br>if outside   |

6) Preparation of Monthly Report of Requisition Orders (RO) Received

|  |  |
|--|--|
| RO Receiving Clerk                     | Verifies RO Record Book<br>Classifies and totals items in<br>each RO for each requisitioning<br>office<br>Types the report in 3 copies<br>and files copy |
| Senior Procurement Clerk               | Checks if figures, classifica-<br>tion and grouping of RO are<br>correct; affixes his initials   |
| Chief, Procurement<br>Services Section | Examines figures in the report<br>Prepares suggestion or corrective<br>measures to minimize place-<br>ment practices of some                             |

requisitioners; affixes  
signature

Action Clerk, Procurement  
Services Section

Records and distributes report  
to Head, Procurement Division  
and Manager, Administration

7) Preparation and Processing of Requests for Quotation

Buyer, Purchasing Section

Verifies list of bona fide  
suppliers whose prices are  
to be canvassed

Accomplishes quotation request  
forms in as many copies as  
there are suppliers

Affixes initials

Senior Buyer

Reviews and checks requests for  
quotation

Chief, Purchasing  
Section

Checks if suppliers are bona fide  
suppliers of the items;  
indicates dates of opening  
of canvass, signs quotation  
requests

Buyer

Gives copy to Action Clerk,  
Procurement Services Section  
and to suppliers being  
invited

Action Clerk, Procurement  
Services Section

Takes note of scheduled date  
of opening of sealed canvass;  
gives COA representative one  
copy

8) Processing of Offers/Quotations

Action Clerk, Procurement  
Services Section  
Procurement Division

Receives, records and routes  
quotations from the manufacturer's,  
suppliers abroad  
or their exclusive distributor  
or representative

Head, Procurement Division

Indicates any instructions he  
may deem necessary

Chief, Purchasing Section

Reviews the quotation

|                                     |   |
|-------------------------------------|---|
| Buyer                               | Checks entries in RO, recommends preparation of PO or IO indicating type of supplier, whether manufacturer, exclusive distributor or representative |
| Senior Buyer                        | Reviews quotation, affixes initials and forwards to Chief, Purchasing Section   |
| Chief, Purchasing Section           | Reviews quotation, Affixes signature approving preparation of PO or IO  |
| Chief, Procurement Services Section | Checks prepared PO or IO  |
| Abstract Clerk                      | Assigns abstract number for control purposes  |

9) Canvassing for Emergency Requirements

|   |  |
|---|--|
| Buyer, Purchasing Section, Procurement Division | Checks list of suppliers for names of suppliers carrying the urgently needed items   |
|   | Prepares draft indicating names, addresses, telephone numbers of the suppliers, quantities and specifications, requisitioning officers, etc. |
|   | Contacts supplier for canvassing   |
| Abstract Clerk                                  | Assigns number, type of abstract of emergency canvass  |
| Buyer   | Evaluates the offers taking special notice of the cheapest prices, most advantageous to the Corporation, initials                            |
| Senior Buyer                                    | Reviews evaluation of offers and awards, affixes initials  |
| Chief, Purchasing Section                       | Reviews evaluation and awards of contract  |

|   |  |
|---|--|
| Head, Procurement<br>Division                                       | Reviews evaluation of offers and<br>awards, indicates approval,<br>affixes initials        |
| NPC-COA* Office   | Receives and records   |
| Senior Property<br>Inspector  | Reviews evaluation and awards,<br>affixes initials   |
| Chief Property Unit<br>Department                                   | Reviews evaluation and awards,<br>affixes signature  |
| Chief, Procurement<br>Services Section                              | Indicates name of Purchase Order<br>Clerk who will prepare PO,<br>affixes initials         |
| PO Clerk  | Acknowledges receipt of Abstract<br>of Emergency Canvass                                   |
| Senior Buyer  | Receives recommendation to<br>Boards and checks necessary<br>supporting documents          |
| Chief Purchasing Section  | Reviews recommendation, affixes<br>initials  |
| Action Clerk  | Records recommendations  |
| Head, Procurement<br>Division                                       | Reviews and initials   |
| Manager, Administration   | Reviews and initials   |
| Asst. General Manager   | Reviews and initials   |
| Board   | Action on recommendation by a<br>resolution approving or dis-<br>approving the transaction |
| General Manager<br>Asst. General Manager<br>Manager, Administration | Affixes signature  |
| Head, Procurement   | Examines resolution and writes<br>instruction to Secretary,<br>DPWTC                       |

---

\*COA - Commission on Audit

Chief Purchasing  
Section

Examines resolution and forwards  
to the Buyer in charge of  
items

Buyer

Examines Board Resolution,  
checks amount involved in  
transaction; attaches other  
supporting papers and for-  
wards to:  
o Chief Procurement Services  
section - if amount  
involved is ₱1 M below  
o DPWTC\* - ₱1 M and above

b. Treasury Department

Materials management under the Treasury Department is handled by the Property and Insurance Division. The division receives and distributes the equipment, materials and other supplies bought by the Procurement Division of the Administrative Department.

The Division has three sections with the following functions:

- o Property Section - responsible for directing and controlling the property receipts documents and inspection of equipment, materials and other supplies.
- o Receiving, Warehousing and Shipping Section - in charge of the actual receipt of orders, handling and storage, and distribution to production units of NPC.
- o Importation and Insurance Section - in charge of preparing documents required in buying equipment, materials and supplies not available in the country and dispatching these through the Receiving, Warehousing and Shipping Section to the production units. It also provides the necessary insurance coverages for the corporate fixed assets.

Following are the procedure governing transactions:  
Property and Insurance Division

1) Receipt and Storage of Equipment, Materials and Supplies

Property Officer

Receives and files Purchase  
Order which also serves as  
authority to receive equip-  
ment. Upon acceptance of  
equipment, verifies the

---

\*DPWTC - Department of Public Works and Telecommunications

equipment delivered against corresponding document together with GAO representative. Prepares a receiving report and forwards equipment to the stores.

Distributes documents to the following:

- Procurement Services Section
- COA representative\*
- Property Custodian

Property Custodian

Acknowledges receipt of goods by recording items/equipment received.

## 2) Issuance of Inventory Items

Storekeeper

Receives duly authorized requisition and issue voucher from requisitioner, picks out item from warehouse, records on "Bin Card" and issues item(s) to requisitioner.

Compiles original copies of requisition and issue voucher submitted to him during the day and forwards these to General Accounting Division every Friday and at end of each month.

## 3) Issuance of Equipment

Property Officer

Receives requisition and release order from requisitioner. Prepares accountability receipt which receiver of equipment acknowledges.

Property Custodian

Checks whether documents for release have been duly approved.

Property Officer

Sends one copy of the authority to Accounting Department; up-date Property Section file.

4) Disposal of Equipment

Property Officer/Senior Clerk

Receives inventory and inspection report of unserviceable property from the field property custodian. Prepares transmittal letter- endorsement to NEDA. Distributes copies to Auditing Office and Accounting Office.

Property Section Chief

Reviews, initials

Head, Property and Insurance Division

Certifies correctness, initials

Manager, Finance Dept.

Recommends approval, initials

General Manager

Approves, signs letter of transmittal to NEDA

Property Officer/Senior Property Clerk

After a reasonable length of time, receives action of NEDA

Chairman, Valuation and Disposal Committee

Receives action

5) Preparation and Process of Disposal of Unserviceable Equipment

Property Custodian

At the month's end prepares Inventory and Inspection report of unserviceable property

Together with the Office of Economic Coordination Committee representative verifies report

Property Officer-OEC

Conducts a visual inspection and indicates appraised value or selling price

6) Issuance of Clearance Certificate for Property Accountability

Property Officer  
Senior Property Clerk

Receives request for clearance for property accountability, requests employee to return



all property accountability

If short of items, employee is required to reimburse value

Prepares receipt for returned equipment, signs and initials clearance certificate

Property Section Chief

Reviews and signs receipt for returned equipment, initials

Head, Property and Insurance Division

Signs clearance certificate as evidence that employee has been cleared of all property accountabilities.

Accountable Employee

Receives documents

#### 7) Lease and Rental Equipment

Property Officer/Senior Property Clerk

Receives from Engineering and Construction Department copy of agreement, prepares authority for the property custodian concerned to release the equipment to the lessee

Property Section Chief

Reviews and initials authority to release

Division Head

Reviews and initials

Manager, Treasury Dept.

Recommends approval

Asst. Gen. Manager

Approves authority

Commission on Audit

Concurs authority or indicates other actions

NPC Records Section

Sends authority thru mail to property custodian concerned

#### 8) Preparation and Processing of Authority to Cash Purchase/ Purchase Locally

Chief, Procurement Services Section

Receives from Head, Procurement Division or Buyer of PO for emergency items or any items which, because of their nature, are more economical to procure in the locality of the requisitioner.

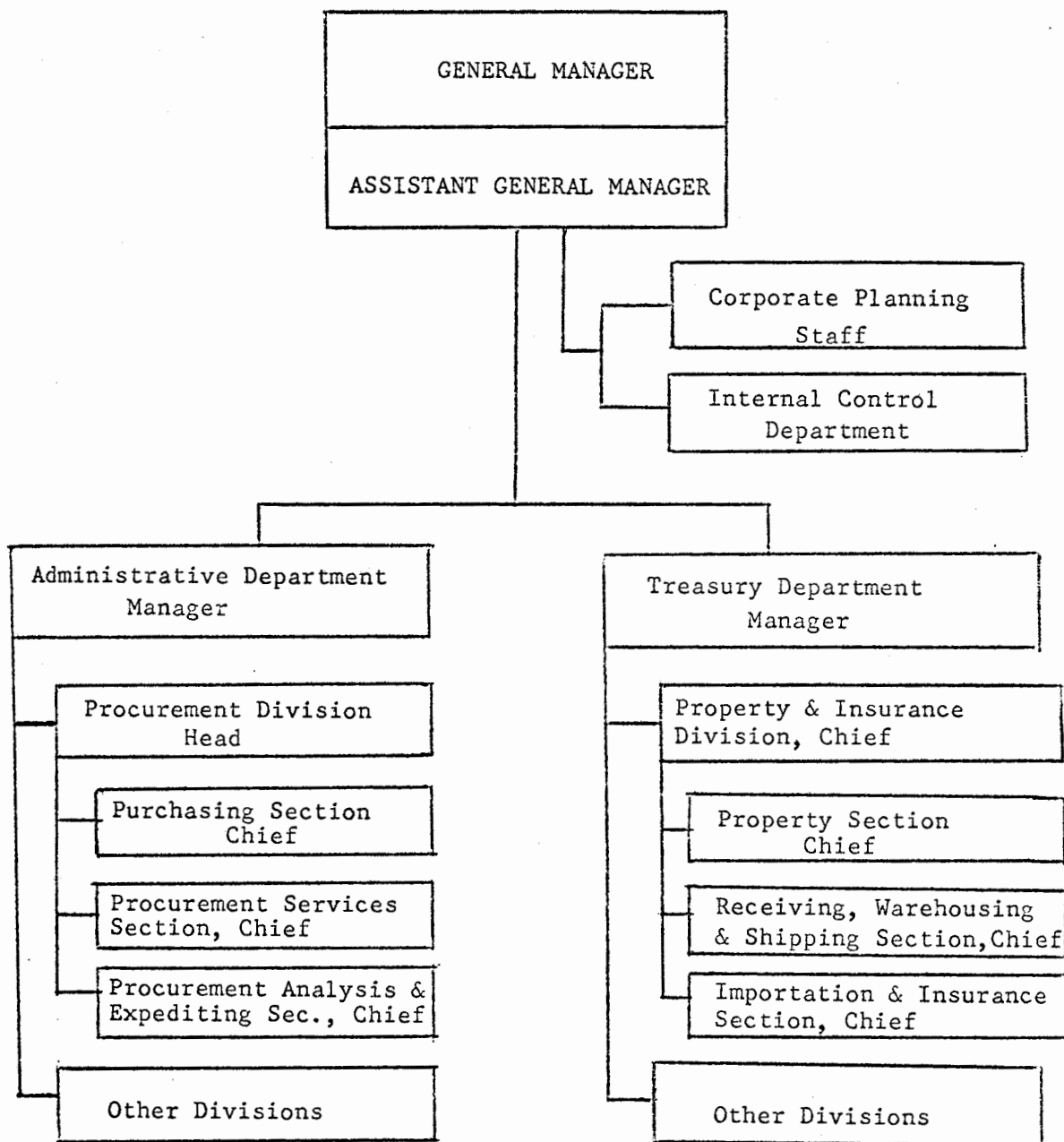
|   |   |
|---|---|
|   | Demands request from requisitioner to cash purchase/purchases locally   |
| Price Index/Reconciliation Clerk  | Checks requisitioner's station and address and prepares authority to cash purchase/purchase locally   |
| Senior Procurement Clerk  | Reviews authority, affixes his initials   |
| Chief, Procurement Services Section   | Reviews authority, affixes initials   |
| Head, Procurement Division  | Reviews authority, affixes initials   |
| Manager, Administration   | Reviews authority and affixes signature   |
| Secretary, Manager Administration   | Records authority as outgoing   |
| 9) <u>Procure in Securing Approval of the National Power Board on Transaction</u> |   |
| Buyer, Procurement Division   | Receives approved abstract of canvass for the supply of items with a total cost of items greater than Pl M proposed to be awarded to one supplier |

Prepares letter to Board for signatures of General Manager recommending approval of transaction, justification of procurement and proposed award of one contract to the supplier who gave the lowest complying offer during the canvass.

#### 4. Conclusions

The top management of the Corporation views organizational structure as a major tool of effecting control over its production activities. Thus all its major production units or departments have been linked with the Office of the General Manager.

NATIONAL POWER CORPORATION  
MATERIALS MANAGEMENT ORGANIZATION CHART



Linkages among the departments are well defined and functions are delineated. The Engineering and Construction Department provides all engineering support to the regional offices in planning, design and construction of new hydro, thermal and geothermal plants and transmission facilities. Moreover, it formulates and implements all production guidelines of the regional offices.

The Special Projects Group, whose main task is to develop nuclear generating capacity, was created with essentially the same units of the Engineering and Construction Department and Regional Offices. It has its own administrative and finance, training (for personnel whose services will be employed in the actual implementation of nuclear projects), engineering and construction units. In other words, the group is almost autonomous in operations in relation to other production departments, especially on the planning and design phases.

The major internal and external constraints met by the Corporation in its production activities and some corresponding actions executed by external agencies and the top management of the corporation follow.

| a. <u>External Constraints</u>  | <u>Actions</u>  |
|---|---|
| 1) Higher costs of oil imports  | Nationalization of an oil refining plant or corporation in the Philippines  |
| 2) Higher costs of equipment imports  | Higher degree of control of the national government through the Energy Development Board of oil importations              |
| 3) Right of way construction problems (i.e., Chico #4 Hydroelectric Plant, Luzon)   | Full financial and other legal guarantees by the national government in implementation of projects throughout the country |
| 4) Power plants and transmission facilities have to meet specifications of lending (foreign) institutions and the Water and Pollution Control Commission of the Philippines | Employment of foreign and local and Department of Public Works and Telecommunications consultancy and project             |
| 5) Delays in budget releases by the national government   | Alterations in the operations budget of the Corporation   |

b. Internal ConstraintsActions

- 1) Inavailability of technical expertise within the Corporation

Employment of outside consultancy and project management services

Training programs (in-house and foreign) for technical personnel

Routes papers to Section Chief, Division Head, Manager Treasury Department and Board of Directors for certification and approval

Evaluates bids received and opened in the presence of NPC-OEC representatives

At the end of the month, forwards xeroxed copies to Property Accounting Division to facilitate process of monthly disposals; together with duplicate copies of the Letter of Award and Abstract of Bids

Property Clerk

Prepares advertisement, notice of auction sale

Records Division

Mails

Property Clerk

Prepares Abstract of Bids and Letter of Award

Records Division

Mails

## PERSONNEL MANAGEMENT

### 1. Objectives

The primary objectives of NPC personnel management operations is staffing, training and servicing of the corporation's personnel. This section of the study deals with the process of personnel recruitment, staff development and provision of compensation and benefits.

The operational activities of personnel management are handled by the Administrative Department. The Department initiates and implements personnel programs based on broad policies provided by top management. Following are its specific functions:

- o Initiate the formulation and establishment of and implement personnel recruitment and testing programs.
- o Update and implement selection and placement policies and procedures.
- o Initiate the formulation and implement staff development (training) programs.
- o Handle all compensation and benefits.
- o Monitor information to top management on day-to-day personnel administration.

### 2. Organizational Structure and Controls

Organizational structure and controls in personnel management of NPC can be broadly described as the General Manager, assisted by the Corporate Planning Staff and Safety and Civil Security Office, directing and supervising the Administrative Department in performing its delegated functions.

The Corporate Planning Staff of the General Manager assists the Administrative Department in the conceptualization and planning of new personnel programs. It reviews new programs planned by the Department prior to submission to the General Manager who approves them. It also evaluates personnel administration information which the Department monitors for the General Manager.

The main task of the Safety and Civil Security Office in personnel management is to protect the Corporation and secure confidential information. As part of its tasks, the office investigates and recommends actions, disciplinary and preventive to the General Manager on any untoward incident that may occur among personnel.

To perform its personnel management functions, the Administrative Department has two divisions, namely, Personnel Services and Human Resources Development Divisions.

a. Personnel Services Division

This division undertakes the recruitment, placement and performance evaluation of NPC personnel. It operates the compensation and benefits services of the enterprise. Equally important, the Division develops and implements new or improved programs. Four sections comprise the division:

1) Recruitment, Selection and Placement Section

- o Undertakes the evaluation and selection of applicants for employment and conducts performance evaluation of current personnel.

2) Appointments and Compensation

- o Processes appointment of selected applicants and inter-unit transfers of employees.
- o Evaluates and sets compensation of new and current employees based on Civil Service Commission regulations.

3) Benefits and Claims

- o Processes personnel benefits and claims such as insurance, sick and vacation leaves and others.

4) Medical and Dental

- o Provides medical and dental services.

b. Human Resources Division

This division handles training and staff development. It also assesses, designs and executes current training requirements of NPC personnel. It has three sections:

1) Planning Research and Evaluation

- o Identifies and assesses manpower training.
- o In collaboration with the two other sections, designs curriculum or training programs for personnel.

## 2) Management and Education

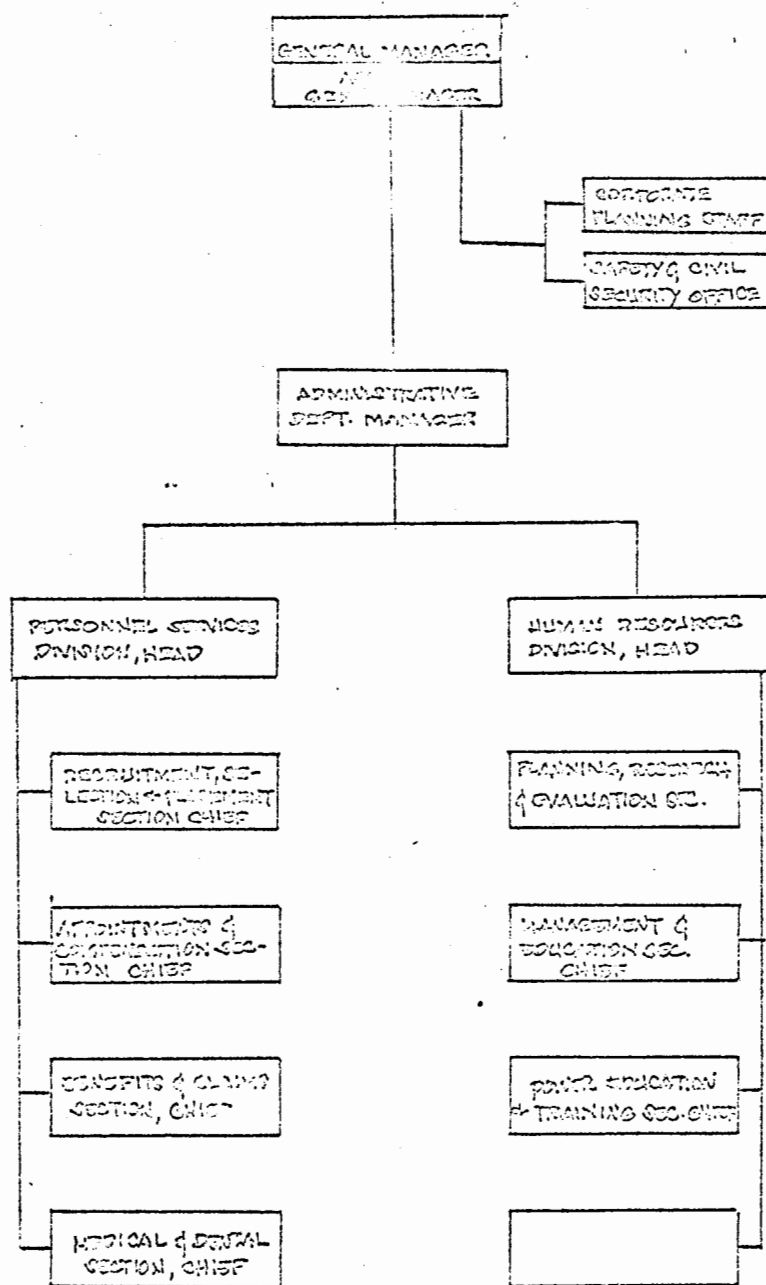
- o Designs training programs for middle management. These usually include courses in public administration, Management Organizational Development and work or performance evaluation.
- o Provides training programs for rank and file personnel in consumers and credit unions, industrial safety, fire prevention and computer programming.

## 3) Power Education and Training

- o Implements the technical component of staff development.
- o Undertakes training programs for newly recruited and current engineering or production personnel on regular basis. In line with the new policy of actively seeking new sources of energy, the section has been training (with assistance from the Special Projects Group and Geothermal unit of the Engineering and Construction Department) personnel who will eventually man the new facilities.

The following is the organizational chart of NPC personnel management structure.





PERSONNEL MANAGEMENT  
NATIONAL POWER CORPORATION

### 3. Operations

Personnel management operations are divided into three: staffing, staff development, and provision of benefits.

#### a. Staffing

The recruitment/selection and eventual placement of new personnel entails a series of activities which begin at the unit requiring additional personnel. The supervisor of a unit requests and specifies the qualifications of the position to the Administrative Department. The Recruitment/Selection and Placement Section then activates its list of candidates or advertises for the position.

Qualified candidates undergo a series of qualifying examinations (aptitude and specialization tests). The section conducts the preliminary interviews with the candidates who pass the tests before final interview by the supervisors of the requesting unit. Salaries are negotiated based on Civil Service Commission wage structures after the final interview.

Selected applicants are appointed after final approval by the General Manager.

During the 1971-75 period, a net (recruitment less termination/retirement) of 852 permanent personnel were processed by the Administrative Department. Incremental contractual employees, mostly assigned to engineering and construction projects, reached 1,784. The table below indicates the growth of NPC personnel for the period.

NPC PERSONNEL  
1971-75

| YEAR | TOTAL | PERMANENT | CONTRACTUAL |
|------|-------|-----------|-------------|
| 1971 | 2,307 | 1,058     | 1,249       |
| 1972 | 2,471 | 1,135     | 1,336       |
| 1973 | 2,963 | 1,057     | 1,906       |
| 1974 | 3,773 | 1,730     | 2,043       |
| 1975 | 5,039 | 2,009     | 3,030       |

SOURCE: NPC

b. Staff Development

In-house training programs are regularly conducted by the Human Resources Division of the Administrative Department to upgrade and develop manpower capabilities in all areas of operations.

The programs are conceptualized, designed and planned by the Division with the assistance of the Corporate Planning Staff. Any program, however, has to be finally reviewed by the latter and approved by the General Manager before being implemented by the Division.

The following are the programs implemented by the Division during the period 1971-75.

1) Management and Education Programs

o Training Programs for Middle Management Personnel

- Public Administration Course
- Intelligence Officers Course
- National Industry Safety
- Manpower Training
- General Review of Law on Public Officers and Administration of Military Justice
- Executive Development Course
- Job Evaluation and Salary Administration

o Training for Lower Management and Rank and File Personnel

- Computer Programming
- Course on Consumers and Credit Union
- Medicare
- Workmen's Compensation Law Seminar
- Cost Reduction Through Inventory Control

2) Power Education and Training Programs

Most of these programs are directed toward personnel involved in production operations.

o Training Programs for Newly Recruited Production Personnel

- Production Orientation Courses
- Hotline Maintenance Course
- Basic Electrician Course

o Training Programs for Current Production Personnel

- Courses On Developments in the Technology of Generating and Transmission Facilities

## - Maintenance Courses

Aside from its in-house training programs, the Division has developed several training packages, mostly for the enterprise production personnel. These include subsidy by NPC of personnel expenses in pursuing their graduate studies in engineering at the University of the Philippines. Also, the enterprise has sent, on the average, 10 engineers annually to the United States and Europe to take courses along engineering lines during the period.

In 1975, the Corporation entered into an agreement with a West German Utility Company for the latter to assess NPC trainers in implementing its production training programs.

### c. Provision of Benefits to Personnel

Handling of compensation, benefits and claims for personnel is a major operational tasks of the Administration Department. Its Personnel Services Division adjusts personnel compensation based on the wage classification of the Civil Service Commission. It processes all benefits and claims of the Corporation's personnel based on the following guidelines (See Appendix E for a more detailed description of personnel benefits and claims):

#### 1) Longevity Pay

Six (6) pesos a month for every year of service for those who have completed at least five (5) years of service.

#### 2) Supplementary Retirement Plan

One month pay for every year of service for those who voluntary resign from the Corporation after 5 1/2 years service.

#### 3) Cost of Living Allowance

- o ₱50 a month pursuant to PD 380
- o ₱150 for unskilled laborers and one fourth of their salary, provided the total sum does not exceed ₱350.

#### 4) Christmas Bonus

One month pay bonus every December of the year.

#### 5) Medical and Dental Services

- o Free Medical (hospitalization and medicines) expenses for employees
- o Free optical glasses but not to exceed ₱30

- o Maximum of P200 dental benefits for employees
- o Maternity benefits not to exceed P120 for employees.

### CONCLUSIONS

The personnel management style of the Corporation is unique among other Philippine Public Enterprises. This is due to constraints from the Civil Service Commission and lack of trained personnel to keep up with the rapid growth of the Corporation's operations.

Two of the more pervasive control areas of the Civil Service Commission over NPC are the review and approval of personnel appointments. The Wages and Position Classification Office (WAPCO) also reviews and approves any change in its personnel wage position structure.

Internal constraints in personnel management derive mainly from lack of trained technical men in power generation. The ambitious plans of the corporation, as discussed in Part I (Goals/Missions and Targets), require expertise which are not readily available.

The lack of trained personnel dates back to 1936 when NPC was first established. When the President of the Philippines recently issued a decree giving the corporation the sole responsibility for the nation's power generation and transmission requirements, the problem has become even more acute.

The Administrative Department responded to the challenge by giving high priority to training of technical personnel. Training programs are classified into in-house and external programs. In-house training programs are usually conducted for both newly recruited and current personnel to further their expertises. Trainers operating the programs are oftentimes residents or employees of the Corporation. Since 1972, NPC has employed external (local and foreign) trainers to augment NPC's in-house training capability.

External programs for engineers and other technical personnel consist of grants and scholarships abroad (Japan, West Germany, UK and USA). Also, NPC has arrangements with the University of the Philippines College of Engineering to enrol interested personnel for graduate studies with NPC subsidy.

### Labor Issues

Prior to the declaration of Martial Law in September 1972, Labor Unions were a major problem of top management. There were two major strikes in NPC, in 1962 and 1968. In both cases, top management granted the unions higher wages and benefits.

Almost five years later labor unions ceased to be a problem. The top management has since attended to the economic well being of the employees. Salary and benefits adjustments have been made for employees

either through presidential decrees and internal policies of the Corporation. For instance, the top management has upheld the continuance of the provisions in the Collective Bargaining Agreement of 1966.

#### Personnel Motivation

An Employees Suggestion and Award System was established in 1975 to stimulate total participation of employees. The enterprise provides monetary awards and other citations to deserving employees for beneficial suggestions and accomplishments in the performance of duties.

## F. MARKETING

The National Power Corporation has no formal marketing unit within its organization. Marketing operations of the enterprise are primarily influenced by the following determinants.

### 1. Macro Planning by the National Government

The Energy Development Board and the National Economic and Development Authority, agencies of the National Government directly under the Office of the President, are the major policy makers on utility or energy development. The National Economic Development Plan, where utility development is included, specifies the sectors and regions of the country which need increased electricity. The National Power Corporation, therefore, bases its facilities development programs on the National Energy Development Plan designed by these two national agencies.

### 2. Monopolist Character of the Corporation

By virtue of PD 40, the Corporation has become the sole enterprise in the country charged with the task of generating and transmitting electricity. As such, there appears to be no major marketing constraint. End users (municipalities, cooperatives and industry bulk users) themselves apply for service at the office of the General Manager who usually approves the application, and delegates to the Regional Manager the actual servicing.

P A R T   T H R E E

QUANTITATIVE ANALYSIS



## A. SOCIAL COST-BENEFIT ANALYSIS

### 1. Evaluation Approach

The appraisal of NPC's productive operations over the 1971-1975 period has been divided into two, financial and economic profitabilities. The financial component of the evaluation is fairly straight-forward. Inputs (costs) and outputs (benefits) were valued in terms of current market prices. The economic profitability appraisal has been guided by the OECD method.

The general principle of the OECD method is the adjustment of market into shadow prices of costs and benefits and more importantly, their evaluation in terms of their potential contribution to earning or saving foreign exchange. The rationale of the approach is that international prices are a better measure of the real value than domestic prices, which are often inflated above their real value to the economy by inclusion of taxes, monopoly profits, overstated wage costs and others in final market prices.<sup>1</sup>

Moreover, the appraisal of the National Power Corporation's productive operations has been limited to direct primary costs and benefits. Externalities or secondary costs and benefits of the corporate operations were not dealt with as no organized data and qualitative information is available in the country.

### 2. Valuation of Resources

The parameters adopted in appraising the productive operations of the enterprise are:

#### Labor

The opportunity cost of labor in the country is considerably less than the obtaining wage rate. Estimation of shadow wage rates was guided by the National Economic Development Authority's previous estimates.<sup>2</sup> In particular, the national shadow wage parameters adopted in the study are as follows:

Urban skilled labor - ₱12.00/day

Urban unskilled labor - ₱ 6.00/day

---

<sup>1</sup>Little and Mirrless

<sup>2</sup>NEDA journal

### Capital

The availability of investment funds is a constraint on development in the country. The cost of capital or interest rates formally expressed in social cost benefit analysis as the "accounting rate of interest," naturally depends on the way investible funds were obtained. Interviews were conducted with the financial managers of the corporation on what would be the appropriate rate of interest charged on the funds borrowed and invested by NPC. On the average, an interest of 7½ has been adopted for this purpose.

### Other Inputs

Prices of other intermediate inputs has been adjusted to eliminate taxes and monopolist profits. An average of 3% sales tax on total market value of intermediate inputs was deducted. Moreover, a 7%<sup>3</sup> average monopolist profits on intermediate inputs was subtracted.

Foreign exchange was valued at one (1) to conform with the OECD approach.

### Output

The output of the NPC was valued at current domestic market prices since the output of the enterprise are not traded internationally.

### RESULTS OF COMPUTATION

The computational results for financial and economic profitabilities of productive operations of the enterprise are presented in the following tables.

---

<sup>3</sup>Interview with Securities and Exchange Commission Office

BIBLIOGRAPHY ON SOCIAL COST BENEFIT  
ANALYSIS

ALONZO, Ruperto, On Measuring Shadow Wages of Philippine Labor, NEDA Journal, Vol. 1, First Semester, 1974

MISHAN, E.J. Cost-Benefit Analysis, Allen and Unwin

PRIEST, A.R. & TURVEY, R., Cost-Benefit Analysis: A Survey Economic Journal, Vol. 75, 1965

LITTLE, I.M.D. and MIRRELESS, J.A., Manual of Industrial Project Analysis, Vols. I and II. Social Cost Benefit Analysis, OECD, 1969

TABLE 1. National Power Corporation  
Income and Loss Statements  
Financial Profitability  
1971 - 1975  
(In Thousand Pesos)

|   | 1 9 7 1          | 1 9 7 2       | 1 9 7 3       | 1 9 7 4         | 1 9 7 5        |
|---|------------------|---------------|---------------|-----------------|----------------|
| Utility Operating Income (Note 1)       | 60,941           | 90,849        | 113,156       | 191,111         | 237,380        |
| Operating Expenses (Less) (Note 2)      | <u>43,382</u>    | <u>49,534</u> | <u>66,885</u> | <u>95,834</u>   | <u>136,188</u> |
| Operating Income                        | 17,559           | 41,315        | 46,271        | 95,277          | 101,192        |
| Other Operating Income (Note 3)         | <u>15,824</u>    | <u>16,281</u> | <u>10,091</u> | <u>(34,381)</u> | <u>16,388</u>  |
| Total Operating Income                  | 33,383           | 57,596        | 56,362        | 60,896          | 117,580        |
| Other Income (Note 4)                   | <u>3,474</u>     | <u>5,703</u>  | <u>5,951</u>  | <u>7,155</u>    | <u>10,801</u>  |
| Total Income                            | 36,857           | 63,299        | 62,313        | 68,050          | 128,381        |
| Other Income Deductions (Less) (Note 5) | <u>37,768</u>    | <u>39,139</u> | <u>34,505</u> | <u>34,143</u>   | <u>27,643</u>  |
| Net Income Before Income Tax            | 2,089            | 24,160        | 27,808        | 33,907          | 100,738        |
| Provision for Income Tax (Less)         | <u>3,527</u>     | <u>-</u>      | <u>-</u>      | <u>-</u>        | <u>-</u>       |
| Net Income (Loss)                       | <u>( 1,438 )</u> | <u>24,160</u> | <u>27,808</u> | <u>33,907</u>   | <u>100,738</u> |

NOTES:

1. Derived from revenues from sale of power
2. Operating expenses:
  - (a) Operation and maintenance expenses of the  
Steampower generation, Hydroelectric Power generation  
Other Power generation and the Transmission and distribution
  - (b) Administration and general expenses
  - (c) Depreciation
3. Income from electric plant leased to others, Power Interchange
4. Composed of the following:
 

|   |                                       |
|---|---------------------------------------|
| (a) Rental Income                         | (d) Miscellaneous                     |
| (b) Interest on Notes/Accounts Receivable | (e) Gain on Disposal of Assets        |
| (c) Interest on Sinking Funds             | (f) Other Interest Income - NPC Bonds |
5. Broken down to the following components
 

|                                       |   |
|---------------------------------------|---|
| (a) Interest Expense                  | (d) Loss on Foreign Exchange Electrification    |
| (b) Amortization of Premiums on bonds | (e) Losses on Disposal of Assets                |
| (c) Finance and other Bank charges    | (f) Other Expenses                              |
|                                       | (g) Expenses on Electric Plants based to others |

TABLE 2. National Power Corporation  
Income and Loss Statements  
1971 - 1975  
(In US Dollars)

| SOCIAL COST/BENEFIT ANALYSIS                         | 1 9 7 1           | 1 9 7 2           | 1 9 7 3           | 1 9 7 4           | 1 9 7 5           |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| <u>Benefits</u>                                      |                   |                   |                   |                   |                   |
| Operating Income                                     | 11,844,618        | 15,927,668        | 18,088,356        | 33,129,137        | 34,844,288        |
| Non-Operating Income                                 | <u>535,987</u>    | <u>863,412</u>    | <u>874,287</u>    | <u>1,046,152</u>  | <u>1,478,936</u>  |
| TOTAL BENEFITS                                       | <u>12,380,605</u> | <u>16,791,080</u> | <u>18,962,642</u> | <u>34,175,289</u> | <u>36,323,224</u> |
| <u>Costs</u>   |                   |                   |                   |                   |                   |
| Personnel  | 1,144,779         | 1,181,495         | 1,399,884         | 1,774,231         | 2,219,009         |
| Current Expense                                      | 5,439,974         | 5,889,163         | 8,054,466         | 12,249,326        | 16,331,871        |
| Interest Expense                                     | <u>5,198,889</u>  | <u>5,761,075</u>  | <u>4,997,011</u>  | <u>4,904,401</u>  | <u>3,690,957</u>  |
| TOTAL COSTS  | <u>11,783,642</u> | <u>12,831,733</u> | <u>14,451,361</u> | <u>18,927,958</u> | <u>22,241,837</u> |
| Net difference<br>Total benefits<br>from total costs | <u>596,963</u>    | <u>3,959,347</u>  | <u>4,511,281</u>  | <u>15,247,331</u> | <u>14,081,387</u> |
| <u>Benefit Cost Ratio:</u>                           |                   |                   |                   |                   |                   |
| <u>Total Benefits =</u><br><u>Total Costs</u>        | <u>1.051</u>      | <u>1.309</u>      | <u>1.312</u>      | <u>1.806</u>      | <u>1.633</u>      |

## A P P E N D I C E S

APPENDIX A

REPUBLIC ACT NO. 6395  
REVISED CHARTER  
FOR THE  
NATIONAL POWER CORPORATION  
AS AMENDED BY  
PRESIDENTIAL DECREES NOS.  
380, 395, 758 and 938

SECTION 1. Declaration of Policy. -- Congress hereby declares that (1) the comprehensive development, utilization and conservation of Philippine water resources for all beneficial uses, including power generation and (2) the total electrification of the Philippines through the development of power from all sources to meet the needs of industrial development and dispersal and the needs of rural electrification are primary objectives of the nation which shall be pursued coordinate-ly and supported by all instrumentalities and agencies of the government, including its financial institutions.

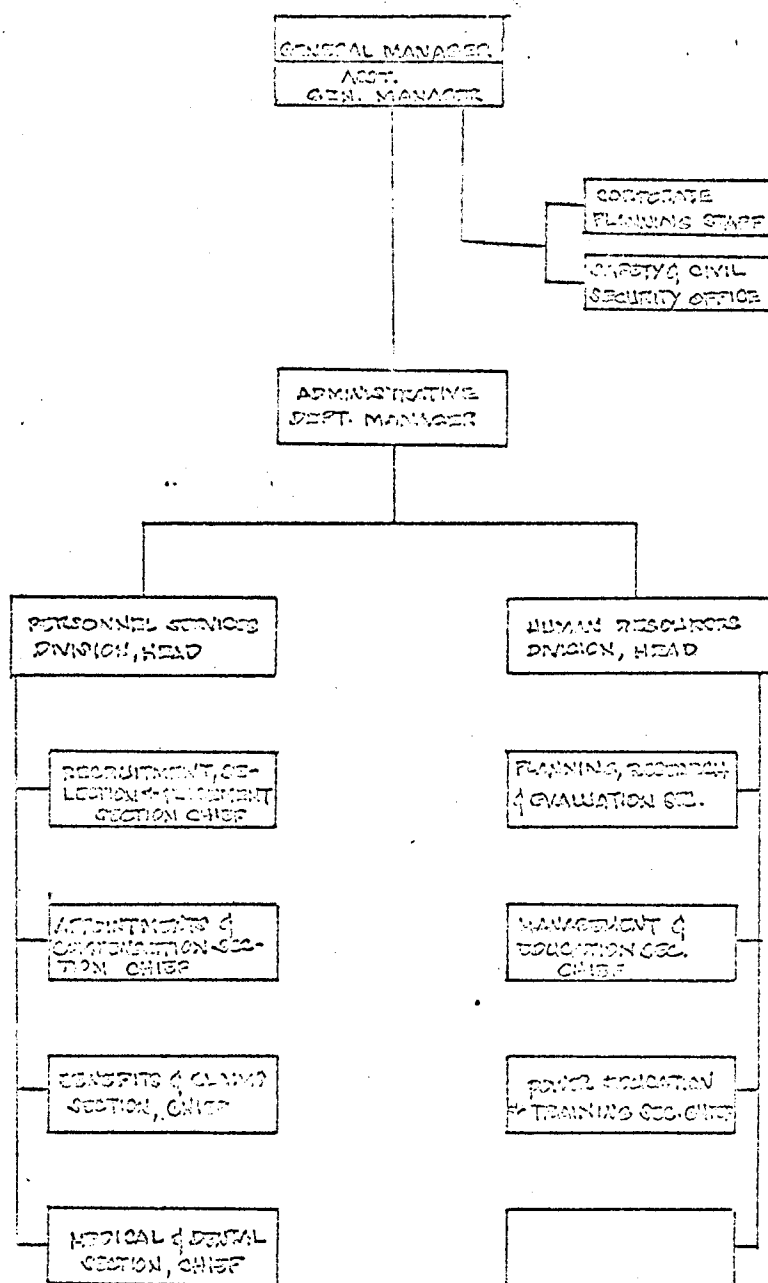
SECTION 2. The National Power Corporation; Its Corporate Life; 'Corporation' and 'Board' Defined. -- To carry out the above-stated policy, specifically to undertake the development of hydroelectric generation of power and the production of electricity from nuclear, geothermal and other sources, as well as the transmission of electric power on nationwide basis, the public corporation created under Commonwealth Act Numbered One Hundred Twenty and known as the 'National Power Corporation' shall continue to exist for fifty years from 1961 after the expiration of its present corporate existence.

In the pursuit of its objectives, the Corporation shall as far as feasible, spread the benefits of its projects and operations to the greatest number of the population possible, and the Corporation shall prosecute faithfully such projects as will promote the total electrification of Luzon Islands, Visayan Islands and the Mindanao Islands.

The words 'Corporation' and 'Board' appearing in this Act shall respectively refer to the National Power Corporation and the National Power Board.

SECTION 3. Powers and General Functions of the Corporation. -- The powers, functions, rights and activities of the Corporation shall be the following:

- (a) To have continuous succession under its corporate name until otherwise provided by law;
- (b) To prescribe its by-laws not inconsistent with this Act;
- (c) To adopt and use a seal and alter it at its pleasure;



PERSONNEL MANAGEMENT  
NATIONAL POWER CORPORATION



### 3. Operations

Personnel management operations are divided into three: staffing, staff development, and provision of benefits.

#### a. Staffing

The recruitment/selection and eventual placement of new personnel entails a series of activities which begin at the unit requiring additional personnel. The supervisor of a unit requests and specifies the qualifications of the position to the Administrative Department. The Recruitment/Selection and Placement Section then activates its list of candidates or advertises for the position.

Qualified candidates undergo a series of qualifying examinations (aptitude and specialization tests). The section conducts the preliminary interviews with the candidates who pass the tests before final interview by the supervisors of the requesting unit. Salaries are negotiated based on Civil Service Commission wage structures after the final interview.

Selected applicants are appointed after final approval by the General Manager.

During the 1971-75 period, a net (recruitment less termination/retirement) of 852 permanent personnel were processed by the Administrative Department. Incremental contractual employees, mostly assigned to engineering and construction projects, reached 1,784. The table below indicates the growth of NPC personnel for the period.

NPC PERSONNEL  
1971-75

| YEAR | TOTAL | PERMANENT | CONTRACTUAL |
|------|-------|-----------|-------------|
| 1971 | 2,307 | 1,058     | 1,249       |
| 1972 | 2,471 | 1,135     | 1,336       |
| 1973 | 2,963 | 1,057     | 1,906       |
| 1974 | 3,773 | 1,730     | 2,043       |
| 1975 | 5,039 | 2,009     | 3,030       |

SOURCE: NPC

b. Staff Development

In-house training programs are regularly conducted by the Human Resources Division of the Administrative Department to upgrade and develop manpower capabilities in all areas of operations.

The programs are conceptualized, designed and planned by the Division with the assistance of the Corporate Planning Staff. Any program, however, has to be finally reviewed by the latter and approved by the General Manager before being implemented by the Division.

The following are the programs implemented by the Division during the period 1971-75.

1) Management and Education Programs

o Training Programs for Middle Management Personnel

- Public Administration Course
- Intelligence Officers Course
- National Industry Safety
- Manpower Training
- General Review of Law on Public Officers and Administration of Military Justice
- Executive Development Course
- Job Evaluation and Salary Administration

o Training for Lower Management and Rank and File Personnel

- Computer Programming
- Course on Consumers and Credit Union
- Medicare
- Workmen's Compensation Law Seminar
- Cost Reduction Through Inventory Control

2) Power Education and Training Programs

Most of these programs are directed toward personnel involved in production operations.

o Training Programs for Newly Recruited Production Personnel

- Production Orientation Courses
- Hotline Maintenance Course
- Basic Electrician Course

o Training Programs for Current Production Personnel

- Courses on Developments in the Technology of Generating and Transmission Facilities

## - Maintenance Courses

Aside from its in-house training programs, the Division has developed several training packages, mostly for the enterprise production personnel. These include subsidy by NPC of personnel expenses in pursuing their graduate studies in engineering at the University of the Philippines. Also, the enterprise has sent, on the average, 10 engineers annually to the United States and Europe to take courses along engineering lines during the period.

In 1975, the Corporation entered into an agreement with a West German Utility Company for the latter to assess NPC trainors in implementing its production training programs.

### c. Provision of Benefits to Personnel

Handling of compensation, benefits and claims for personnel is a major operational tasks of the Administration Department. Its Personnel Services Division adjusts personnel compensation based on the wage classification of the Civil Service Commission. It processes all benefits and claims of the Corporation's personnel based on the following guidelines (See Appendix E for a more detailed description of personnel benefits and claims):

#### 1) Longevity Pay

Six (6) pesos a month for every year of service for those who have completed at least five (5) years of service.

#### 2) Supplementary Retirement Plan

One month pay for every year of service for those who voluntary resign from the Corporation after 6 1/2 years service.

#### 3) Cost of Living Allowance

- o ₱50 a month pursuant to PD 380
- o ₱150 for unskilled laborers and one fourth of their salary, provided the total sum does not exceed ₱350.

#### 4) Christmas Bonus

One month pay bonus every December of the year.

#### 5) Medical and Dental Services

- o Free Medical (hospitalization and medicines) expenses for employees
- o Free optical glasses but not to exceed ₱30

- o Maximum of ₱200 dental benefits for employees
- o Maternity benefits not to exceed ₱120 for employees.

### CONCLUSIONS

The personnel management style of the Corporation is unique among other Philippine Public Enterprises. This is due to constraints from the Civil Service Commission and lack of trained personnel to keep up with the rapid growth of the Corporation's operations.

Two of the more pervasive control areas of the Civil Service Commission over NPC are the review and approval of personnel appointments. The Wages and Position Classification Office (WAPCO) also reviews and approves any change in its personnel wage position structure.

Internal constraints in personnel management derive mainly from lack of trained technical men in power generation. The ambitious plans of the corporation, as discussed in Part I (Goals/Missions and Targets), require expertise which are not readily available.

The lack of trained personnel dates back to 1936 when NPC was first established. When the President of the Philippines recently issued a decree giving the corporation the sole responsibility for the nation's power generation and transmission requirements, the problem has become even more acute.

The Administrative Department responded to the challenge by giving high priority to training of technical personnel. Training programs are classified into in-house and external programs. In-house training programs are usually conducted for both newly recruited and current personnel to further their expertises. Trainers operating the programs are often-times residents or employees of the Corporation. Since 1972, NPC has employed external (local and foreign) trainers to augment NPC's in-house training capability.

External programs for engineers and other technical personnel consist of grants and scholarships abroad (Japan, West Germany, UK and USA). Also, NPC has arrangements with the University of the Philippines College of Engineering to enrol interested personnel for graduate studies with NPC subsidy.

### Labor Issues

Prior to the declaration of Martial Law in September 1972, Labor Unions were a major problem of top management. There were two major strikes in NPC, in 1962 and 1968. In both cases, top management granted the unions higher wages and benefits.

Almost five years later labor unions ceased to be a problem. The top management has since attended to the economic well being of the employees. Salary and benefits adjustments have been made for employees

either through presidential decrees and internal policies of the Corporation. For instance, the top management has upheld the continuance of the provisions in the Collective Bargaining Agreement of 1966.

#### Personnel Motivation

An Employees Suggestion and Award System was established in 1975 to stimulate total participation of employees. The enterprise provides monetary awards and other citations to deserving employees for beneficial suggestions and accomplishments in the performance of duties.

## F. MARKETING

The National Power Corporation has no formal marketing unit within its organization. Marketing operations of the enterprise are primarily influenced by the following determinants.

### 1. Macro Planning by the National Government

The Energy Development Board and the National Economic and Development Authority, agencies of the National Government directly under the Office of the President, are the major policy makers on utility or energy development. The National Economic Development Plan, where utility development is included, specifies the sectors and regions of the country which need increased electricity. The National Power Corporation, therefore, bases its facilities development programs on the National Energy Development Plan designed by these two national agencies.

### 2. Monopolist Character of the Corporation

By virtue of PD 40, the Corporation has become the sole enterprise in the country charged with the task of generating and transmitting electricity. As such, there appears to be no major marketing constraint. End users (municipalities, cooperatives and industry bulk users) themselves apply for service at the office of the General Manager who usually approves the application, and delegates to the Regional Manager the actual servicing.

P A R T   T H R E E

QUANTITATIVE ANALYSIS

## A. SOCIAL COST-BENEFIT ANALYSIS

### 1. Evaluation Approach

The appraisal of NPC's productive operations over the 1971-1975 period has been divided into two, financial and economic profitabilities. The financial component of the evaluation is fairly straight-forward. Inputs (costs) and outputs (benefits) were valued in terms of current market prices. The economic profitability appraisal has been guided by the OECD method.

The general principle of the OECD method is the adjustment of market into shadow prices of costs and benefits and more importantly, their evaluation in terms of their potential contribution to earning or saving foreign exchange. The rationale of the approach is that international prices are a better measure of the real value than domestic prices, which are often inflated above their real value to the economy by inclusion of taxes, monopoly profits, overstated wage costs and others in final market prices.

Moreover, the appraisal of the National Power Corporation's productive operations has been limited to direct primary costs and benefits. Externalities or secondary costs and benefits of the corporate operations were not dealt with as no organized data and qualitative information is available in the country.

### 2. Valuation of Resources

The parameters adopted in appraising the productive operations of the enterprise are:

#### Labor

The opportunity cost of labor in the country is considerably less than the obtaining wage rate. Estimation of shadow wage rates was guided by the National Economic Development Authority's previous estimates.<sup>2</sup> In particular, the national shadow wage parameters adopted in the study are as follows:

Urban skilled labor - P12.00/day

Urban unskilled labor - P 6.00/day

---

<sup>1</sup>Little and Mirrless

<sup>2</sup>NEDA journal



### Capital

The availability of investment funds is a constraint on development in the country. The cost of capital or interest rates formally expressed in social cost benefit analysis as the "accounting rate of interest," naturally depends on the way investible funds were obtained. Interviews were conducted with the financial managers of the corporation on what would be the appropriate rate of interest charged on the funds borrowed and invested by NPC. On the average, an interest of 7½ has been adopted for this purpose.

### Other Inputs

Prices of other intermediate inputs has been adjusted to eliminate taxes and monopolist profits. An average of 3% sales tax on total market value of intermediate inputs was deducted. Moreover, a 7%<sup>3</sup> average monopolist profits on intermediate inputs was subtracted.

Foreign exchange was valued at one (1) to conform with the OECD approach.

### Output

The output of the NPC was valuated at current domestic market prices since the output of the enterprise are not traded internationally.

### RESULTS OF COMPUTATION

The computational results for financial and economic profitabilities of productive operations of the enterprise are presented in the following tables.

---

<sup>3</sup> Interview with Securities and Exchange Commission Office

TABLE 1. National Power Corporation  
Income and Loss Statements  
Financial Profitability  
1971 - 1975  
(In Thousand Pesos)

|   | 1 9 7 1          | 1 9 7 2       | 1 9 7 3       | 1 9 7 4         | 1 9 7 5        |
|---|------------------|---------------|---------------|-----------------|----------------|
| Utility Operating Income (Note 1)       | 60,941           | 90,849        | 113,156       | 191,111         | 237,380        |
| Operating Expenses (Less) (Note 2)      | <u>43,382</u>    | <u>49,534</u> | <u>66,885</u> | <u>95,834</u>   | <u>136,188</u> |
| Operating Income                        | 17,559           | 41,315        | 46,271        | 95,277          | 101,192        |
| Other Operating Income (Note 3)         | <u>15,824</u>    | <u>16,281</u> | <u>10,091</u> | <u>(34,381)</u> | <u>16,388</u>  |
| Total Operating Income                  | 33,383           | 57,596        | 56,362        | 60,896          | 117,580        |
| Other Income (Note 4)                   | <u>3,474</u>     | <u>5,703</u>  | <u>5,951</u>  | <u>7,155</u>    | <u>10,801</u>  |
| Total Income                            | 36,857           | 63,299        | 62,313        | 68,050          | 128,381        |
| Other Income Deductions (Less) (Note 5) | <u>37,768</u>    | <u>39,139</u> | <u>34,505</u> | <u>34,143</u>   | <u>27,643</u>  |
| Net Income Before Income Tax            | 2,089            | 24,160        | 27,808        | 33,907          | 100,738        |
| Provision for Income Tax (Less)         | <u>3,527</u>     | <u>-</u>      | <u>-</u>      | <u>-</u>        | <u>-</u>       |
| Net Income (Loss)                       | ( <u>1,438</u> ) | <u>24,160</u> | <u>27,808</u> | <u>33,907</u>   | <u>100,738</u> |

NOTES:

1. Derived from revenues from sale of power
2. Operating expenses:
  - (a) Operation and maintenance expenses of the  
Steampower generation, Hydroelectric Power generation  
Other Power generation and the Transmission and distribution
  - (b) Administration and general expenses
  - (c) Depreciation
3. Income from electric plant leased to others, Power Interchange
4. Composed of the following:
 

|   |                                       |
|---|---------------------------------------|
| (a) Rental Income                         | (d) Miscellaneous                     |
| (b) Interest on Notes/Accounts Receivable | (e) Gain on Disposal of Assets        |
| (c) Interest on Sinking Funds             | (f) Other Interest Income - NPC Bonds |
5. Broken down to the following components
 

|                                       |   |
|---------------------------------------|---|
| (a) Interest Expense                  | (d) Loss on Foreign Exchange Electrification    |
| (b) Amortization of Premiums on bonds | (e) Losses on Disposal of Assets                |
| (c) Finance and other Bank charges    | (f) Other Expenses                              |
|                                       | (g) Expenses on Electric Plants based to others |

TABLE 2. National Power Corporation  
Income and Loss Statements  
1971 - 1975  
(In US Dollars)

| SOCIAL COST/BENEFIT ANALYSIS                  | 1 9 7 1           | 1 9 7 2           | 1 9 7 3           | 1 9 7 4           | 1 9 7 5           |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
| <u>Benefits</u>                               |                   |                   |                   |                   |                   |
| Operating Income                              | 11,844,618        | 15,927,668        | 18,088,356        | 33,129,137        | 34,844,288        |
| Non-Operating Income                          | <u>535,987</u>    | <u>863,412</u>    | <u>874,287</u>    | <u>1,046,152</u>  | <u>1,478,936</u>  |
| TOTAL BENEFITS                                | <u>12,380,605</u> | <u>16,791,080</u> | <u>18,962,642</u> | <u>34,175,289</u> | <u>36,323,224</u> |
| <u>Costs</u>                                  |                   |                   |                   |                   |                   |
| Personnel                                     | 1,144,779         | 1,181,495         | 1,399,884         | 1,774,231         | 2,219,009         |
| Current Expense                               | 5,439,974         | 5,889,163         | 8,054,466         | 12,249,326        | 16,331,871        |
| Interest Expense                              | <u>5,198,889</u>  | <u>5,761,075</u>  | <u>4,997,011</u>  | <u>4,904,401</u>  | <u>3,690,957</u>  |
| TOTAL COSTS                                   | <u>11,783,642</u> | <u>12,831,733</u> | <u>14,451,361</u> | <u>18,927,958</u> | <u>22,241,837</u> |
| Net difference                                |                   |                   |                   |                   |                   |
| Total benefits<br>from total costs            | <u>596,963</u>    | <u>3,959,347</u>  | <u>4,511,281</u>  | <u>15,247,331</u> | <u>14,081,387</u> |
| <u>Benefit Cost Ratio:</u>                    |                   |                   |                   |                   |                   |
| <u>Total Benefits =</u><br><u>Total Costs</u> | <u>1.051</u>      | <u>1.309</u>      | <u>1.312</u>      | <u>1.806</u>      | <u>1.633</u>      |

BIBLIOGRAPHY ON SOCIAL COST BENEFIT  
ANALYSIS

ALONZO, Ruperto, On Measuring Shadow Wages of Philippine Labor, NEDA Journal, Vol. 1, First Semester, 1974

MISHAN, E.J. Cost-Benefit Analysis, Allen and Unwin

PRIEST, A.R. & TURVEY, R., Cost-Benefit Analysis: A Survey Economic Journal, Vol. 75, 1965

LITTLE, I.M.D. and MIRRLESS, J.A., Manual of Industrial Project Analysis, Vols. I and II. Social Cost Benefit Analysis, OECD, 1969

A P P E N D I C E S

APPENDIX A

REPUBLIC ACT NO. 6395  
REVISED CHARTER  
FOR THE  
NATIONAL POWER CORPORATION  
AS AMENDED BY  
PRESIDENTIAL DECREES NOS.  
380, 395, 758 and 938

SECTION 1. Declaration of Policy. -- Congress hereby declares that (1) the comprehensive development, utilization and conservation of Philippine water resources for all beneficial uses, including power generation and (2) the total electrification of the Philippines through the development of power from all sources to meet the needs of industrial development and dispersal and the needs of rural electrification are primary objectives of the nation which shall be pursued coordinately and supported by all instrumentalities and agencies of the government, including its financial institutions.

SECTION 2. The National Power Corporation; Its Corporate Life; 'Corporation' and 'Board' Defined. -- To carry out the above-stated policy, specifically to undertake the development of hydroelectric generation of power and the production of electricity from nuclear, geothermal and other sources, as well as the transmission of electric power on nationwide basis, the public corporation created under Commonwealth Act Numbered One Hundred Twenty and known as the 'National Power Corporation' shall continue to exist for fifty years from and after the expiration of its present corporate existence.

In the pursuit of its objectives, the Corporation shall as far as feasible, spread the benefits of its projects and operations to the greatest number of the population possible, and the Corporation shall prosecute faithfully such projects as will promote the total electrification of Luzon Islands, Visayan Islands and the Mindanao Islands.

The words 'Corporation' and 'Board' appearing in this Act shall respectively refer to the National Power Corporation and the National Power Board.

SECTION 3. Powers and General Functions of the Corporation. -- The powers, functions, rights and activities of the Corporation shall be the following:

- (a) To have continuous succession under its corporate name until otherwise provided by law;
- (b) To prescribe its by-laws not inconsistent with this Act;
- (c) To adopt and use a seal and alter it at its pleasure;

(d) To sue and be sued in any court;

(e) To conduct investigations and surveys for the development of water power in any part of the Philippines;

(f) To take water from any public stream, river creek, lake, spring or waterfall in the Philippines, for the purposes specified in this Act; to intercept and divert the flow of waters from lands of riparian owners and from persons owning or interested in waters which are or may be necessary for said purposes, upon payment of just compensation therefor; to alter, straighten, obstruct or increase the flow of water in streams or water channels intersecting or connecting therewith or contiguous to its works or any part thereof: Provided, That just compensation shall be paid to any person or persons whose property is, directly or indirectly, adversely affected or damaged thereby;

(g) (As amended by Presidential Decree No. 380 and further amended by Presidential Decree No. 395) To construct, operate and maintain power plants, auxiliary plants, dams, reservoirs, pipes, mains, transmission lines, power stations and substations, and other works for the purpose of developing hydraulic power from any river, creek, lake, spring and waterfall in the Philippines and supplying such power to the inhabitants thereof; to acquire, construct, install, maintain, operate, and improve gas, oil or steam engines, and/or other prime movers, generators and machinery in plants and/or auxiliary plants for the production of electric power; to establish, develop, operate, maintain and administer power and lighting system for the transmission and utilization of its power generation; to sell electric power in bulk to (1) industrial enterprises, (2) city, municipal or provincial systems and other government institutions, (3) electric cooperatives, (4) franchise holders, and (5) real estate subdivisions; Provided, That the sale of power in bulk to industrial enterprises and real estate subdivisions may be undertaken by the Corporation when the power requirement of such enterprises or real estate subdivisions is not less than 100 kilowatts; Provided, further, That no restriction shall apply to sale of power in bulk to enterprises registered with the Board of Investments; Provided, finally, That the Corporation shall continue to sell electricity to industrial enterprises under existing contracts, and provide for the collection of charges for any service rendered;

(h) (As amended by Presidential Decree No. 938) To acquire, promote, hold, transfer, sell, lease, rent, mortgage, encumber and otherwise dispose of property incident to, or necessary, convenient or proper to carry out the purposes for which the Corporation was created.

(i) (As amended by Presidential Decree No. 380 and further amended by Presidential Decree No. 938) To construct works across, or otherwise, any stream, watercourse, canal, ditch, flume, street, avenue, highway, or railway of private and public ownership, as the location of said works may require; Provided, That said works be constructed in such a manner as not to endanger life or property; And,

Provided, further, That the stream, watercourse, canal, ditch, flume, street, avenue, highway or railway so crossed or intersected be restored as near as possible to their former state or in a manner not to impair unnecessarily their usefulness. Every person or entity whose right-of-way or property is lawfully crossed or intersected by said works shall not obstruct any such crossings or intersections and shall grant the Corporation or its representatives, the proper authority for the execution of such work. The Corporation is hereby given the right-of-way to locate, construct, and maintain such works over and throughout the lands owned by the Republic of the Philippines or any of its branches and political subdivisions. The Corporation or its representatives may also enter upon private property in the lawful performance or prosecution of its business or purposes, including the construction of the transmission lines thereon; Provided, That the owner of such private property shall be paid the just compensation therefore in accordance with the provisions hereinafter provided; Provided, further, That any action by any person claiming compensation and/or damages shall be filed within five (5) years after the right-of-way, transmission lines, substations, plants or other facilities shall have been established; Provided, finally, That after the said period no suit shall be brought to question the said right-of-way, transmission lines, substations, plants or other facilities nor the amounts of compensation and/or damages involved.

(j) (As amended by Presidential Decree No. 938) To exercise the right of eminent domain for the purpose of this Act in the manner provided by law for instituting condemnation proceedings by the national, provincial, and municipal government as modified or amended by Presidential Decree No. 42.

(k) When essential to the proper administration of its corporate affairs or necessary for the proper transaction of its business or to carry out the purposes for which it was organized, to contract indebtedness and issue bonds subject to approval of the President upon recommendation of the Secretary of Finance;

(l) (As amended by Presidential Decree No. 380) To exercise such powers and do such things as may be reasonably necessary to carry out the business and purposes for which it was organized, or which, from time to time, may be declared by the Board to be necessary, useful, incidental or auxiliary to accomplish the said purpose, including the establishment of subsidiaries;

(m) (As amended by Presidential Decree No. 380) To cooperate with, and to coordinate its operations with those of the Power Development Council, the National Electrification Administration and public service entities;

(n) To exercise complete jurisdiction and control over watersheds surrounding the reservoirs of plants and/or projects constructed or proposed to be constructed by the Corporation. Upon determination by the Corporation of the areas required for watersheds for a specific project, the Bureau of Forestry, the Reforestation Administration and the Bureau of Lands shall, upon written advice by the Corporation,



forthwith surrender jurisdiction to the Corporation of all areas embraced within the watersheds, subject to existing private rights, the needs of waterworks systems, and the requirements of domestic water supply;

(o) (As amended by Presidential Decree No. 380) In the prosecution and maintenance of its projects and plants, the Corporation shall adopt measures to prevent environmental pollution and enhance the conservation, development and maximum utilization of natural resources, including the improvements and beautification of its reservoirs and other areas to promote tourism and related purposes, and to provide for the necessary corporate funds therefore; and

(p) Generally, to exercise all the powers of a corporation under the Corporation Law insofar as they are not inconsistent with the provisions of this act.

SECTION 3-A (As inserted under Presidential Decree No. 938)  
In acquiring private property or private property rights through expropriation proceedings where the land or portion thereof will be traversed by the transmission lines, only a right-of-way easement thereon shall be acquired when the principal purpose for which such land is actually devoted will not be impaired, and where the land itself or portion thereof will be needed for the projects or works, such land or portion thereof as necessary shall be acquired.

In determining the just compensation of the property or property sought to be acquired through expropriation proceedings, the same shall -

(a) With respect to the acquired land or portion thereof, not exceed the market value declared by the owner or administrator or anyone having legal interest in the property, or such market value as determined by the assessor, whichever is lower.

(b) With respect to the acquired right-of-way easement over the land or portion thereof, not exceed ten per cent (10%) of the market value declared by the owner or administrator or anyone having legal interest in the property, or such market value as determined by the assessor, whichever is lower.

In addition to the just compensation for easement of right-of-way, the owner of the land or owner of the improvement, as the case may be, shall be compensated for the improvements actually damaged by the construction and maintenance of the transmission lines, in an amount not exceeding the market value thereof as declared by the owner or administrator, or anyone having legal interest in the property, or such market value as determined by the assessor whichever is lower; Provided, That in cases any buildings, houses and similar structures are actually affected by the right-of-way for the transmission lines, their transfer, if feasible, shall be affected at the expense of the Corporation; Provided, further, That such market

value prevailing at the time the Corporation gives notice to the landowner or administrator or anyone having legal interest in the property, to the effect that his land or portion thereof is needed for its projects or works shall be used as basis to determine the just compensation therefore.

SECTION 4. Fixing of Rates by the Board and Review by the Public Service Commission. -- The Board shall fix the rates and fees to be charged by the Corporation so that the Corporation's rate of return shall be not more than ten per centum (10%) on a rate base composed of the sum of its net assets in operation as revalued from time to time plus two months' operating capital: Provided, That in determining the rate of return, interest on loans, bonds and other debts shall not be included as expenses. Such rates and fees shall be effective and enforceable fifteen (15) days after publication in a newspaper of general circulation. The Public Service Commission shall have exclusive original jurisdiction over all cases contesting said rates or fees. Any complaint against such rates or fees shall be filed with the Public Service Commission within thirty (30) days after the effectivity of such rates or fees, but the filing of such complaint or action shall not stay the effectivity of said rates or fees. The Public Service Commission shall verify the rate base, and the rate of return computed therefrom, in accordance with the standards herein outlined. The Public Service Commission shall finish, within Sixty (60) calendar days, any and all proceedings necessary and/or incidental to the case, and shall render its findings or decisions thereon within thirty (30) calendar days after said case is submitted for decision.

In cases where the decision is against the fixed rates or fees, excess payments shall be reimbursed and/or credited to future payments, in the discretion of the Commission.

The decision of the Public Service Commission shall be appealable to the Supreme Court in accordance with the provisions of the Rules of Court.

(As amended by Presidential Decree No. 380) The Corporation shall charge in any interconnected system a uniform schedule of rates for all its customers that fall within the same classification. Towards this end, the Corporation shall prescribe a standard form of contract and appropriate rules and regulations for the sale of electricity, which shall be uniformly applied and become effective on all power customers after they are duly notified or fifteen days after their publication in newspapers of general circulation. All subsisting power contracts, are hereby considered revised to give immediate effectivity to this provision.

#### SECTION 5. Capital Stock of the Corporation

(As amended by Presidential Decree No. 380 and further amended by Presidential Decree No. 938) The authorized capital stock of the

the Corporation is Two Billion Pesos (P2,000,000,000.00) divided into eighty million (80,000,000) shares having a par value of one hundred pesos each, which shares are not to be transferred, negotiated, pledged, mortgaged or otherwise given as security for the payment of any obligation. The sum of Three Hundred Million Pesos of said capital stock has been subscribed and paid wholly by the Government of the Philippines in accordance with the provisions of Republic Act Numbered Four Thousand Eight Hundred Ninety-Seven.

(As amended by Presidential Decree No. 380 and further amended by Presidential Decree No. 938) The remaining Seven Billion Seven Hundred Million Pesos shall be subscribed by the Government of the Republic of the Philippines and shall be paid as follows:

(a) (As amended by Presidential Decree No. 380) The sum of twenty-nine million two hundred sixty-seven thousand six hundred pesos representing outstanding cost and interest of reparations goods procured by the Corporation pursuant to the provisions of Republic Act Numbered Seventeen Hundred Eighty-Nine, shall be additional paid-in subscription of the Government of the Philippines for two hundred ninety-two thousand six hundred seventy-six shares of stock of said capital stock.

(b) (As amended by Presidential Decree No. 380 and further amended by Presidential Decree No. 758) The balance of said subscription shall be paid by the conversion into equity capital of the existing bonded indebtedness, cost of reparations goods that may be allocated in the future, and surpluses of the Corporation, and in the absence thereof, from bond issue upon request of the corporation for specific projects duly approved from time to time by the President of the Philippines. AN ANNUAL APPROPRIATION OF NOT LESS THAN TWO HUNDRED MILLION PESOS WHICH IS HEREBY MADE OUT OF ANY FUNDS IN THE NATIONAL TREASURY NOT OTHERWISE APPROPRIATED, BE THEY COLLECTIONS FROM ANY OR ALL TAXES ACCRUING TO THE GENERAL FUND OR PROCEEDS FROM LOANS, THE ISSUANCE OF BONDS, TREASURY BILLS OR NOTES WHICH ARE HEREBY AUTHORIZED TO BE INCURRED OR TO BE ISSUED BY THE SECRETARY OF FINANCE FOR THE PURPOSE, SUCH ANNUAL APPROPRIATION TO BE PROGRAMMED AND RELEASED BY THE BUDGET COMMISSION IN ACCORDANCE WITH THE SCHEDULE OF CASH REQUIREMENTS TO BE SUBMITTED BY THE CORPORATION; PROVIDED, THAT THIS ANNUAL APPROPRIATION OF NOT LESS THAN TWO HUNDRED MILLION PESOS AND THE PROGRAMMING AND RELEASE THEREOF SHALL REMAIN IN FORCE UNTIL THE BALANCE OF THE UNPAID SUBSCRIPTION OF THE GOVERNMENT TO THE CAPITAL STOCK OF THE CORPORATION SHALL HAVE BEEN PAID IN FULL.

SECTION 6. The National Power Board; Its Composition; Compensation of Members; Qualifications; Powers and Duties -- The corporate powers of the Corporation shall be vested in and exercised by the Board composed of seven members consisting of a chairman, vice-chairman and five directors who, with the exception of the vice-chairman, shall be appointed by the President of the Philippines, with the consent of The Commission on Appointments.

In the appointment of said members, the President of the Philippines shall appoint one to represent Luzon, one to represent the Visayas, one to represent Mindanao, one to represent Labor, and one to represent the Business Sector. The Labor Representative shall be chosen from at least five recommendees of the employees' recognized bargaining units in the Corporation.

The General Manager shall be the ex-officio Vice-Chairman of the Board.

The said members of the Board shall serve for terms of three years, except that any person appointed to fill a vacancy shall serve only for the unexpired term of the member whom he succeeds.

Every member of the Board shall possess any one or a combination of the following qualifications: A duly licensed professional of recognized competence in Engineering, in business management and finance, or in law, particularly in the field or corporate practice, with at least ten years actual and distinguished experience in their respective fields of expertise, or a recognized labor leader with sufficient training, particularly in labor-management relations, and of good moral character. The regional representatives appointed by the President of the Philippines shall be residents of the regions they represent.

(As amended by Presidential Decree No. 380) The members of said Board shall receive a per diem of not to exceed three hundred pesos for each regular meeting of the Board and one hundred pesos for each special meeting actually attended by them; Provided, That such per diems shall not exceed one thousand five hundred pesos during any month for each member.

A majority of the members of the Board shall constitute a quorum for the transaction of the business of the Board.

The Board shall, moreover, have the following specific powers and duties:

(a) To formulate and adopt policies and measures for the management and operation of the Corporation;

(b) (As amended by Presidential Decree No. 380) To adopt an annual and supplemental budget of receipts and expenditures of the Corporation according to its requirements, which may include financial assistance of not more than ten thousand pesos each to municipalities that are contiguous to watersheds, lakes or natural sources which are proven to have suffered material damages due to the harnessing of hydroelectric power being utilized by the Corporation, subject to the approval of the Office of the President; Provided, That copies of the budgets of receipts and expenditures herein referred to shall be submitted to the National Assembly within fifteen (15) days from the transmission thereof to the Office of the President;

(c) (As amended by Presidential Decree No. 380) Subject to the provisions of existing laws and regulations and upon the recommendation of the General Manager, to reorganize in a manner other than what is provided for under this Act and Section 3 of Republic Act No. 4177 and determine the Corporation's staffing pattern and the number of personnel, to fix their salaries and to define their power and duties subject to approval of higher authorities.

(d) (As amended by Presidential Decree No. 380) To appoint and fix the compensation of the General Manager, Assistant General Manager, regional managers and department chiefs subject to the approval of the President of the Philippines;

(e) (As amended by Presidential Decree No. 380) For cause to suspend or remove by a majority vote of all members, with the approval of the President of the Philippines, the General Manager, Assistant General Manager, regional managers and department chiefs;

(f) To adopt and set down guidelines for the employment of personnel on the basis of merit, technical competence and moral character.

**SECTION 7. The General Managers; His Powers and Duties; Regional Managers and Other Officers and Employees of the Corporation.**

(As amended by Presidential Decree No. 938) The Management of the Corporation shall be vested in the General Manager, assisted by such number of Assistant General Managers, Officials, officers and employees as may be deemed necessary by the Board of Directors of the Corporation to meet the management and technical manpower requirements of its expanding power development projects, which reorganization shall be subject to the approval of the President.

The General Manager shall have the following powers and duties:

(a) To execute and administer the policies and measures approved by the Board, and have the responsibility for the efficient discharge of management functions.

(b) To submit for the consideration of the Board such other policies and measures which he deems necessary to carry out the purposes and provisions of this Act;

(c) To direct and supervise the operation and internal administration of the Corporation and, for this purpose, may delegate some or any of his administrative responsibilities and duties to other officers of the Corporation;

(d) Subject to the guidelines and policies set up by the Board, to appoint and fix the number and compensation of subordinate officials and employees of the Corporation; and, for cause, to remove, suspend or otherwise discipline, any subordinate employee with the approval of the Board;

(e) To prepare an annual report on the activities of the Corporation at the close of each fiscal year and submit a copy thereof to the President of the Philippines, President of the Senate, and Speaker of the House of Representatives and to the Chairman of the Committee concerned in the Senate and in the House of Representatives: Provided, That the Corporation shall similarly submit to the respective chairman of the said committees of Congress a report of its operations and financial statements within fifteen (15) days from the end of every quarter: And, Provided, further, That said committees, either motu proprio or upon the request of any of their members, or of any Member of Congress, as the case may be, shall have the authority to look into all the matters relative to the financial and business operations and expenditures of the Corporation;

(f) To exercise such other powers and duties as may be vested in him by the Board from time to time. In the case of absence or disability of the General Manager, the Asistant General Manager shall act in his place.

Under the supervision and control of the General Manager, the regional managers shall take charge of the operations of the Corporation as well as its power development program within their respective regions, and, subject to such conditions as the Board may prescribe upon recommendation of the General Manager, shall have as much autonomy as shall ensure the efficient conduct of the Corporation's affairs.

The Auditor General shall be ex-officio Auditor of the Corporation. The provisions of Section five hundred eighty-four of the Revised Administrative Code, as amended by Section one of Republic Act Numbered Twenty-two hundred sixty-six, shall apply to the office of the Representative of the Auditor General in the Corporation.

**SECTION 8. Authority to Incur Indebtedness and Issue Bonds; Their Conditions, Privileges and Exemptions, Sinking Funds; Guarantee.--**

(a) Domestic Indebtedness. -- Whenever the Board deems it necessary for the Corporation to incur indebtedness or to issue bonds to carry out the purpose for which the Corporation has been organized, it shall, by resolution, so declare and state the purpose for which the proposed debt is to be incurred and the conditions of the bonds. In order that such resolution be valid, it shall be passed by the affirmative vote of at least four members of the Board and approved by the President of the Philippines upon recommendation of the Secretary of Finance.

The bonds shall be issued under the following conditions: (1) they shall be in registered form and transferable at the Office of the Treasurer of the Philippines; (2) they shall not be sold at less than par; (3) they shall be payable ten years or more from date of issue as may be determined by the Secretary of Finance before their issuance but may be redeemable, at the pleasure of the Board, after five years from such date of issue; (4) they shall bear interest at an annual rate to be determined before their issuance by the Secretary of Finance; (5) the interest may be payable quarterly, semi-annually or annually

as may be determined by the Secretary of Finance before the issuance of the bonds; and (6) both principal and interest shall be payable in legal tender of the Philippines.

The bonds issued under the authority of this subsection shall be exempt from the payment of all taxes by the Republic of the Philippines, or by any authority, branch, division or political subdivision thereof which facts shall be stated upon the face of said bonds. Said bonds shall be receivable as security in any transaction with the Government in which such security is required.

A sinking fund shall be created, the total thereof at each annual due date of the bonds shall be equal to an amount of annuity earning an annual interest of nine-tenths of the rate of interest of the bonds as fixed by the Secretary of Finance. The sinking fund shall be under the custody of the Treasurer of the Philippines, who shall invest the same subject to the approval of the Board and the Secretary of Finance.

The Republic of the Philippines hereby guarantees the payment by the Corporation of both the principal and the interest of the bonds issued by said Corporation by virtue of this Act, and shall pay such principal and interest in case the Corporation fails to do so, and there are hereby appropriated, out of the general funds in the National Treasury not otherwise appropriated, the sums necessary to make the payments guaranteed by this Act: Provided, That the sums so paid by the Republic of the Philippines shall be refunded by the Corporation: Provided, further, That the Corporation shall set aside five per centum of its annual net operating revenues before interests as a reserve or sinking fund to answer for amounts advanced to it by the National Government for any loan, credit and indebtedness contracted by the former for which the latter shall be held answerable as primary obligor or guarantor under the provisions of this Act: Provided, furthermore, That the setting aside of the amounts mentioned herein shall automatically cease the moment the accumulated sinking fund or reserve exceeds the amounts advanced to the Corporation by the National Government under this Act: And, Provided, finally, That the Corporation may periodically make partial payments to the National Government out of the said reserves.

(As amended by Presidential Decree No. 380 and further amended by Presidential Decree No. 938) The total principal indebtedness of the Corporation under this subsection, exclusive of interests, shall not at any time exceed Twelve Billion Pesos (P12,000,000,000.00).

(b) (As amended by Presidential Decree No. 380 and further amended by Presidential Decree No. 938) Foreign Loans. -- The Corporation is hereby authorized to contract loans, credits any convertible foreign currency or capital goods, and indebtedness from time to time from foreign governments, or any international financial institutions or fund sources, or to issue bonds, the total outstanding amount of which, exclusive of interests, shall not exceed Four Billion United States Dollars (US\$4,000,000,000.00) or the equivalent thereof in other currencies, on such terms and conditions as it shall deem



appropriate for the accomplishment of its purposes and to enter into and execute agreements and other documents specifying such terms and conditions.

(As amended by Presidential Decree No. 380) The President of the Philippines, by himself, or through his duly authorized representative, is hereby authorized to negotiate and contract with foreign governments or any international financial institutions or fund sources, in the name and on behalf of the Corporation, one or several loans, for the purpose of assisting in the reconstruction, or promoting the development of the economy of the country.

(As amended by Presidential Decree No. 380) The President of the Philippines, by himself, or through his duly authorized representative, is hereby further authorized to guarantee, absolutely and unconditionally, as primary obligor and not as surety merely, in the name and on behalf of the Republic of the Philippines, the payment of the loans, credits, indebtedness and bonds issued up to the amount herein authorized, which shall be over and above the amount which the President of the Philippines is authorized to guarantee under Republic Act Numbered Sixty-One Hundred Forty-Two, as amended, as well as the performance of all or any of the obligations undertaken by the Corporation in the territory of the Republic of the Philippines pursuant to loan agreements entered into with foreign governments or any international financial institutions or fund sources.

(As inserted under Presidential Decree No. 938) In the contracting of any loan, credit or indebtedness under this Act, the President of the Philippines may, when necessary, agree to waive or modify the application of any law granting preferences or imposing restrictions on international competitive bidding, including among others, Act Numbered Four Thousand Two Hundred Thirty-Nine, Commonwealth Act Numbered One Hundred Thirty-Eight, the provisions of Commonwealth Act Numbered Five Hundred Forty-One, Republic Act Numbered Five Thousand One Hundred Eighty-Three, insofar as such provisions do not pertain to constructions primarily for national defense or security purposes; Provided, however, That as far as practicable, utilization of the services of qualified domestic firms in the presecution of projects financed under this Act shall be encouraged; Provided, further, That in case where international competitive bidding shall be conducted preference of at least fifteen per centum shall be granted in favor of articles, materials or supplies of the growth, production or manufacture of the Philippines; Provided, finally, That the method and procedure in the comparison of bids shall be the subject of agreement between the Philippine Government and the lending institution.

(As amended by Presidential Decree No. 380) The loans, credits and indebtedness contracted under this subsection and the payment of the principal, interest and other charges thereon, as well as the importation of machinery, equipment, materials, supplies and services, by the Corporation, paid from the proceeds of any loan, credit or indebtedness incurred under this Act, shall also be exempt from all direct and indirect taxes, fees, imposts, other charges and restrictions, including import restrictions previously and presently imposed, and to



be imposed by the Republic of the Philippines, or any of its agencies and political subdivisions.

SECTION 9. Construction of Power Projects Recommended by the General Manager. -- Upon determination by the General Manager, on his own initiative or as recommended by the regional manager concerned, that the construction of any project by the Corporation is advisable to the Board, a report on the engineering and economic feasibility of the project together with preliminary plans and estimates of the cost of the proposed development and the estimated income to be derived therefrom shall be submitted by the General Manager.

The Board may thereupon, at its discretion, designate a consulting board composed of two competent and impartial engineers and one competent economist to pass upon the different aspects of the project and comment on the report of the General Manager. The Board shall, with the said report and comment in view, decide whether or not the project shall be constructed, and what changes, if any, shall be made in the scheme proposed by the General Manager.

SECTION 10. (As amended by Presidential Decree No. 938) Construction, Repair Works, or Contracts for Services and Furnishing of Supplies, Materials and Equipment Awarded Upon Public Bidding; Exceptions. -- All works of construction or repair of the Corporation as well as contracts for the services and furnishing of supplies, materials and equipment shall be awarded by the Corporation in accordance with ceilings and rules imposed by the Board; Provided, however, That these do not conflict with existing Executive Orders and/or presidential issuance on awards of contracts.

SECTION 11. Penalty for Destroying, Injuring or Interfering with any Project of the Corporation, or Maliciously Interfering with any Person in the Discharge of his Duties Connected Therewith. - Any person or persons who shall maliciously destroy, injure, or interfere with any canal, raceway, ditch, lock, pier, inlet, crib, bulkhead, dam, gate, sluice, reservoir, aqueduct, conduit, pipes, culvert, post, abutment, conductor, cable-wire, insulator, weir, benchmark, monument, or other works, appliance, machinery, building or property of the Corporation, or who shall maliciously do any act which shall injuriously affect the quantity or quality of the water or electrical energy of the Corporation or the supply, transmission, measurement, or regulation thereof, or who shall maliciously interfere with any person engaged in the discharge of duties connected therewith, or who shall maliciously prevent, obstruct and interfere with the survey, works and the construction of access road and transmission lines or any related works of the Corporation, shall be guilty of felony and punished with a fine ranging from one to five thousand pesos or with imprisonment ranging from one to five years, or both such fine and imprisonment, at the discretion of the Court, and any injured party shall have the right to recover all damages suffered and cost of such in a separate civil action in any court of competent jurisdiction.

SECTION 12. Appropriation of Public Waters. -- Subject to existing rights, all unappropriated public waters which may be used and developed for hydraulic power purposes shall be granted to the Corporation by the Secretary of Public Works and Communications; Provided, That in case of conflict with the needs of domestic water supply the latter shall prevail.

SECTION 13. (As amended by Presidential Decree No. 938) Non-profit Character of the Corporation; Exemption from All Taxes, Duties, Fees, Imposts and Other Charges by the Government and Government Instrumentalities. -- The Corporation shall be non-profit and shall devote all its returns from its capital investment as well as excess revenues from its operation, for expansion. To enable the Corporation to pay its indebtedness and obligations and in furtherance and effective implementation of the policy enunciated in Section One of this Act, the Corporation, including its subsidiaries, is hereby declared exempt from the payment of all forms of taxes, duties, fees, impostas as well as costs and service fees including filing fees, appeal bonds, superseas bonds, in any court or administrative proceedings.

SECTION 14. Contract with Franchise Holders, Conditions of. -- The Corporation shall, in any contract for the supply of electric power to a franchise holder, require as a condition that the franchise holder, if it receives at least sixty per cent of its electric power and energy from the Corporation, shall not realize a rate of return of more than twelve per cent annually on a rate base composed of the sum of its net assets in operation revalued from time to time, plus two-month operating capital, subject to the non-impairment-of-obligations-of contracts provision of the Constitution: Provided, That in determining the rate of return, interest or loans, bonds and other debts shall not be included as expenses. It shall likewise be a condition in the contract that the Corporation shall cancel or revoke the contract upon judgment of the Public Service Commission after due hearing and upon a showing by customers of the franchise holder that household electrical appliances have been damaged resulting from deliberate overloading by, or power deficiency of, the franchise holder. The Corporation shall renew all existing contracts with franchise holders for the supply of electric power and energy in order to give effect to the provisions hereof.

SECTION 15. Laws Governing Relations of Corporation with Electric Cooperatives. -- Nothing in this Act, shall, directly or indirectly, alter, modify, or repeal the provisions of Republic Act Numbered Six thousand thirty-eight, particularly in respect of the rights of electric cooperatives registered under the same Act. In its contracts and relations with such cooperatives, the Corporation shall be governed by the provisions of the said Act and the specific legislative franchise of such cooperatives.

SECTION 16. Non-impairment of Collective Bargaining Agreements and Rights of Labor Unions. -- Nothing in this Act shall be construed to impair existing collective bargaining agreements with the labor unions in the Corporation or the right of employees to organize and bargain collectively or diminish the rights of labor in the Corporation under the Industrial Peace Act of other labor laws.

APPENDIX B

MALACAÑANG  
Manila

PRESIDENTIAL DECREE NO. 380

AMENDING CERTAIN SECTIONS OF REPUBLIC ACT NUMBERED SIXTY-THREE  
HUNDRED NINETY-FIVE, ENTITLED "AN ACT REVISING THE  
CHARTER OF THE NATIONAL POWER CORPORATION"

WHEREAS, under Republic Act No. 6395, it has been declared that: the comprehensive development, utilization and conservation of Philippine water resources for all beneficial uses, including power generation, and (2) the total electrification of the Philippines through the development of power from all sources to meet the needs of industrial development and dispersal and the needs of rural electrification and primary objectives of the nation which shall be pursued coordinately and supported by all instrumentalities and agencies of the government, including its financial institutions;

WHEREAS, under Presidential Decree No. 40, dated November 7, 1972, certain basic policies for the attainment of the objectives for the speedy electrification of the country more particularly the rural areas, have been established;

WHEREAS, under the basic policies for the electric power industry established under Presidential Decree No. 40, the National Power Corporation (NPC) is also given the responsibility for the setting up of transmission line grids and the construction of associated generation facilities in Luzon, Mindanao, and major islands of the country, including the Visayas and to own and operate as a single integrated system all generating facilities supplying electric power to the entire area embraced by any grid set up by the NPC;

WHEREAS, the additional responsibilities and expanded activities of NPC under Presidential Decree No. 40 will more than treble the capital requirements needed for the expansion of generation and transmission facilities, in addition to the funds necessary for the acquisition of existing generation facilities in areas embraced by grids set up by NPC;

WHEREAS, in order to attain expeditiously the declared objective of total electrification of the country and to implement the basic policies established under Presidential Decree No. 40, certain sections of Republic Act Numbered Sixty-Three Hundred Ninety-Five should be amended;

NOW, THEREFORE, I, FERDINAND E. MARCOS, President of the Philippines, by virtue of the powers vested in me by the Constitution as Commander-in-Chief of the Armed Forces of the Philippines, and

pursuant to Proclamation No. 1081, dated September 21, 1972, and General Order No. 1, dated September 22, 1972, do hereby amend certain sections or provisions of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, to wit:

SECTION 1. Section 3 (g) of the Charter of the National Power Corporations, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is thereby amended to read as follows:

"(g) To construct, operate and maintain power plants, auxiliary plants, dams, reservoirs, pipes, mains, transmission lines, power stations and substations, and other works for the purpose of developing hydraulic power from any river, creek, lake, spring and waterfall in the Philippines and supplying such power to the inhabitants thereof; to acquire, construct, install, maintain, operate and improve gas, oil or steam engines, and/or other prime movers, generators and machinery in plants and/or auxiliary plants for the production of electric power; to establish, develop, operate maintain and administer power and lighting system for the transmission and utilization of its power generation; to sell electric power in bulk to (1) industrial enterprises, (2) city, municipal or provincial systems and other government institutions, (3) electric cooperatives, (4) franchise holders, and (5) real estate subdivisions; Provided, That the sale of power in bulk to industrial enterprises and real estate subdivisions may be undertaken by the Corporation when the power requirements of such enterprises or real estate subdivisions is not less than 100 kilowatts, when in the judgment of the Board of Power and Waterworks in the cooperative supplying electric power or franchise holder of the area is not in a position by itself, or fails or refuses to adequately supply such power requirement, unless the electric cooperative or franchise holder consents thereto; Provided, further, That no restriction shall apply to sale of power in bulk to enterprise registered with the Board of Investment, wherein the cost of power, based on the Corporation's then prevail-tariffs, is more than ten per cent (10%) of the total production cost of the goods or commodities produced; Provided, finally, That the Corporation shall continue to sell electricity to industrial enterprises under existing contracts, and provide for the collection of charges for any service rendered;"

SECTION 2. Section 3 (i) of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is hereby amended to read as follows:

"(i) To construct works across, or otherwise, any stream, watercourse, canal, ditch, flume, street, avenue,

highway or railway of private and public ownership, as the location of said works may require; Provided, That said works be constructed in such a manner as not to endanger life or property; and Provided, further, That the stream, watercourse, canal, ditch, flume, street, avenue, highway or railway so crossed or intersected be restored as near as possible to their former state, or in a manner not to impair unnecessarily their usefulness. Every person or entity whose right of way or property is lawfully crossed or intersected by said works shall not obstruct any such crossings or intersection and shall grant the Corporation or its representative, the proper authority for the execution of such work. The Corporation is hereby given the right of way to locate, construct, and maintain such works over and throughout the lands owned by the Republic of the Philippines or any of its branches and political subdivisions. The Corporation or its representative may also enter upon private property in the lawful performance or prosecution of its business or purposes, including the construction of the transmission lines thereon; Provided, That the owner or such private property shall be compensated as follows:

"(a) In case only an easement of right of way for a transmission line is acquired, then only a nominal easement fees shall be paid which shall be in an amount equivalent to not more than ten per cent of the value of the land or portion thereof required for the right of way of the line, based on the tax declaration that is valid and effective at the time of the filing of the complaint for eminent domain or actual entry into the property by the corporation, whichever is earlier;

"(b) In case the land shall be acquired by purchase, the fair market value thereof, which shall be the value of the land based on the tax declaration that is valid and effective at the time of the filing of the complaint for eminent domain, or the taking of said land by the corporation, whichever is earlier; and

"(c) In addition, the owner shall be compensated for the improvements such as houses, buildings, structures and/or agricultural crops and the like, actually damaged during the construction, operation and maintenance of such works on the land, in amounts based on the value of such improvements appearing on the tax declaration that is valid and effective and/or the prevailing valuation of such agricultural crops and the like made by the appropriate appraisal body authorized by law at the time of filing of the complaint for eminent domain or taking of said improvements by the Corporation, whichever is earlier;

Provided, further, That any action for compensation and/or damages under (a), (b), and (c) above, is filed within five years after the rights of way, transmission lines, substations, plants or other facilities shall have been established; Provided, finally, That after the said period no suit shall be brought to question the said rights of way, transmission lines, substations, plants or other facilities nor the amounts of compensation and/or damages involved."

SECTION 3. Section 3, paragraphs (l), (m) and (o) of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is hereby amended to read as follows:

"(l) To exercise such powers and do such things as may be reasonably necessary to carry out the business and purposes for which it was organized, or which, from time to time, may be declared by the Board to be necessary, useful, incidental or auxiliary to accomplish the said purpose, including the establishment of subsidiaries;

"(m) To cooperate with, and to coordinate its operations with those of the Power Development Council, the National Electrification Administration and public service entities;

" x x x

x x x

"(o) In the prosecution and maintenance of its projects and plants, the Corporation shall adopt measures to prevent environmental pollution and enhance the conservation, development and maximum utilization of natural resources, including the improvements and beautification of its reservoirs and other areas to promote tourism and related purposes, and to provide for the necessary corporate funds therefor; and"

SECTION 4. Section 4, fourth paragraph of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is hereby amended to read as follows:

"The Corporation shall charge in any interconnected system a uniform schedule of rates for all its customers that fall within the same classification. Towards this end, the Corporation shall prescribe a standard form of contract and appropriate rules and regulations for the sale of electricity, which shall be uniformly applied and become effective on all power customers after they are duly notified or fifteen days after their publication in newspapers of general circulation. All subsisting power contracts are hereby considered revised to give immediate effectivity to this provision."

SECTION 5. Section 5 of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is hereby amended to read as follows:

"SEC. 5. Capital Stock of the Corporation. - The authorized capital stock of the Corporation is two billion pesos divided into twenty million shares having a par value of one hundred pesos each, which shares are not to be transferred, negotiated, pledged, mortgaged or otherwise given as security for the payment of any obligation. The sum of three hundred million pesos of said capital stock has been subscribed and paid wholly by the Government of the Philippines in accordance with the provisions of Republic Act Numbered Four Thousand Eight Hundred Ninety-Seven.

"The remaining one billion seven hundred million pesos shall be subscribed by the Government of the Philippines and shall be paid as follows:

"(a) The sum of twenty-nine million two hundred sixty-seventhousand six hundred pesos representing outstanding cost and interest of reparations goods procured by the Corporation pursuant to the provisions of Republic Act Numbered Seventeen Hundred Eighty-Nine, shall be additional paid-in subscription of the Government of the Philippines for two hundred ninety-two thousand six hundred seventy-six shares of stock of said capital stock;

"(b) The balance of said subscription shall be paid by the conversion into equity capital of the existing bonded indebtedness, cost of reparations goods that may be allocated to the Corporation in the future, and surpluses of the Corporation, and in the absence thereof, from bond issue upon request of the Corporation for specific projects duly approved from time to time by the President of the Philippines."

SECTION 6. Section 6, sixth paragraph of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is hereby amended to read as follows:

"The members of said Board shall receive per diem of not to exceed three hundred pesos for each regular meeting of the Board and one hundred pesos for each special meeting actually attended by them; Provided, That such per diems shall not exceed one thousand five hundred pesos during any month for each member."

SECTION 7. Section 6, paragraphs (b), (c), (d) and (e) of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is hereby amended to read as follows:

"(b) To adopt an annual and supplemental budget of receipts and expenditures of the Corporation according to its requirements, which may include financial assistance of not more than ten thousand pesos each to municipalities that are contiguous to watersheds, lakes or natural

sources which are proven to have suffered material damages due to the harnessing of hydroelectric power being utilized by the Corporation, subjected to the approval of the Office of the President; Provided, That copies of the budgets of receipts and expenditures herein referred to shall be submitted to the National Assembly within fifteen (15) days from the transmission thereof to the Office of the President:

"(c) Subject to the provision of existing laws and regulations and upon the recommendation of the General Manager, to organize, reorganize in a manner other than what is provided for under this act and Section 3 of Republic Act No. 4177 and determine the Corporation's staffing pattern and the number of personnel, to fix their salaries and to define their power and duties subject to approval of higher authorities.

"(d) To appoint and fix the compensation of the General Manager, Assistant General Manager, regional managers and department chiefs subject to the approval of the President of the Philippines;

"(e) For cause to suspend or remove by a majority vote of all members, with the approval of the President of the Philippines, the General Manager, Assistant General Manager, regional managers and department chiefs;"

SECTION 8. Section 8 (a), last paragraph, of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is hereby amended to read as follows:

"The total principal indebtedness of the Corporation under this subsection, exclusive of interest, shall not at any time exceed three billion pesos."

SECTION 9. Section 8 (b) of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is hereby amended to read as follows:

"(b) Foreign Loans. - The Corporation is hereby authorized authorized to contract loans, credits, any convertible foreign currency or capital goods, and indebtedness from time to time from foreign governments, or any international financial institutions or fund sources, or to issue bonds, the total outstanding amount of which, exclusive of interests shall not exceed one billion United States dollars or the equivalent thereof in other currencies, on such terms and conditions as it shall deem appropriate for the accomplishment of its purposes and to enter into and execute agreements and other documents specifying such terms and conditions.

"The President of the Philippines, by himself, or through his duly authorized representative, is hereby



authorized to negotiate and contract with foreign governments or any international financial institutions or fund sources in the name and on behalf of the Corporation, one or several loans, for the purposes of assisting in the reconstruction, or promoting the development of the economy of the country.

"The President of the Philippines, by himself, or through his duly authorized representative, is hereby further authorized to guarantee, absolutely and unconditionally, as primary obligor and not as surety merely, in the name and on behalf of the Republic of the Philippines, the payment of the loans, credits, indebtedness and bonds issued up to the amount herein authorized, which shall be over and above the amount which the President of the Philippines is authorized to guarantee under Republic Act Numbered Sixty-One Hundred Forty-Two, as amended, as well as the performance of all or any of the obligations undertaken by the Corporation in the territory of the Republic of the Philippines pursuant to loan agreements entered into with foreign governments or any international financial institutions or fund sources.

"The loans, credits and indebtedness contracted under this subsection and the payment of the principal, interest and other charges thereon, as well as the importation of machinery, equipment, materials, supplies and services, by the Corporation, paid from the proceeds of any loan, credit or indebtedness incurred under this Act, shall also be exempt from all direct and indirect taxes, fees, imposts, other charges and restrictions, including import restrictions previously and presently imposed, and to be imposed by the Republic of the Philippines, or any of its agencies and political subdivisions."

SECTION 10. Section 13, paragraphs (a) and (d), of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, is hereby amended to read as follows:

"(a) From the payment of all taxes, duties, fees, imposts, charges and restrictions to the Republic of the Philippines, its provinces, cities, municipalities and other government agencies and instrumentalities, including the taxes, duties, fees, imposts and other charges provided for under the Tariff and Customs Code of the Philippines, Republic Act Numbered Nineteen Hundred-Thirty Seven, as amended, and as further amended by Presidential Decree No. 34, dated October 27, 1972, and Presidential Decree No. 69, dated November 24, 1972, and costs and service fees in any court or administrative proceedings in which it may be a party;

" x x x

x x x

"(d) From all taxes, duties, fees, imposts, and all other charges imposed directly or indirectly by the Republic of the Philippines, its provinces, cities, municipalities and other government agencies and instrumentalities, on all petroleum products used by the corporation in the generation, transmission, utilization and sale of electric power."

SECTION 11. A new section shall be inserted to be known as Section 15-A of the Charter of the National Power Corporation, Republic Act Numbered Sixty-Three Hundred Ninety-Five, which provides as follows:

"Sec. 15-A. The Corporation shall be under the direct supervision of the Office of the President and all legal matters shall be handled by the Chief Legal Counsel of the Corporation, provided that the Solicitor General's Office shall have supervision in the handling of court cases only of the Corporation.

"Considering that the operation of the business of the Corporation affects public convenience and welfare, all industrial disputes in the Corporation shall be settled by compulsory arbitration."

SECTION 12. This Decree is hereby made part of the law of the land and provisions of existing laws, executive and administrative orders, or parts thereof, in conflict with this Decree are hereby modified and repealed.

SECTION 13. This Decree shall take effect immediately.

Done in the City of Manila, this 22nd day of January in the Year of Our Lord, Nineteen Hundred and Seventy-Four.

(SGD) FERDINAND E. MARCOS

By the President:

(SGD) ALEJANDRO MELCHOR  
Executive Secretary

APPENDIX C

FIRST NATIONAL ASSEMBLY  
First Session

B. No. 2326

(COMMONWEALTH ACT NO. 120)

AN ACT CREATING THE "NATIONAL POWER CORPORATION," PRESCRIBING ITS POWERS  
AND ACTIVITIES, APPROPRIATING THE NECESSARY FUNDS THEREFORE, AND  
RESERVING THE UNAPPROPRIATED PUBLIC WATERS FOR ITS USE.

Be it enacted by the National Assembly of the Philippines:

SECTION 1. For the purpose of undertaking the development of hydraulic power and the production of power from other sources and for other purposes specified in this Act, there is hereby created a public corporation which shall be known as the "National Power Corporation." The words "Corporation" and "Board" appearing in this Act shall respectively refer to the National Power Corporation and the National Power Board, hereinafter created.

SECTION 2. The powers, functions, rights and activities of the said corporation shall be the following:

(a) To have continuous succession under its corporate name until otherwise provided by law;

(b) To prescribe its by-laws;

(c) To adopt and use of a seal and alter it at its pleasure;

(d) To sue and be sued in any court;

(e) To conduct investigations and surveys for the development of water power in any part of the Philippines;

(f) To take water from any public stream, river, creek, lake, spring or waterfall in the Philippines, for the purposes specified in this Act; to intercept and divert the flow of waters from lands of riparian owners and from persons owning or interested in waters which are or may be necessary for said purposes, upon payment of due compensation therefore; to alter, straighten, obstruct or increase the flow of water in streams or water channels intersecting or connecting therewith or contiguous to its works or any part thereof;

(g) To construct, operate and maintain power plants, auxiliary plants, dams, reservoirs, pipes, mains, transmission lines, power stations and substations and other works for the purpose of developing hydraulic

power from any river, creek, lake, spring and waterfall in the Philippines and supplying such power to the inhabitants thereof; to acquire, construct, install, maintain, operate and improve gas, oil, or steam engines, and/or other prime movers, generators and other machinery in plants and/or auxiliary plants for the production of electric power; to establish, develop, operate, maintain and administer power and lighting systems for the use of the Government and the general public; to sell electric power and to fix the rates and provide for the collection of the charges for any service rendered: Provided, That the rates of the charges shall not be subject to revision by the Public Service Commission;

(h) To acquire, promote, hold, transfer, sell, lease, rent, mortgage, encumber and otherwise dispose of anything incident to, or necessary, convenient or proper to carry out the purposes for which the corporation was created;

(i) To construct works across, or otherwise, any stream, watercourse, canal, ditch, flume, street, avenue, highway or railway of private and public ownership, as the location of said works may require: Provided, That said works be constructed in such a manner as not to endanger life or property; And Provided, further, That the stream, watercourse, canal, ditch, flume, street, avenue, highway or railway so crossed or intersected be restored as near as may be to their former state, or in a manner not to impair unnecessarily their usefulness. Every person or entity whose right-of-way is crossed or intersected by said works shall not obstruct any such crossings or intersections and shall grant the Board or its representative, the proper authority for the execution of such work. The Corporation is hereby given the right-of-way to locate, construct and maintain such works over and throughout the lands owned by the Commonwealth of the Philippines or any of its branches and political subdivisions. The Corporation or its representative may also enter upon private property in the lawful performance or prosecution of its business and purposes: Provided, That the owner of such private property shall be indemnified for any actual damage caused thereby;

(j) To exercise the right of eminent domain for the purpose of this Act in the manner provided by law for instituting condemnation proceedings by the national, provincial, and municipal government;

(k) When essential to the proper administration of its corporate affairs or necessary for the proper transaction of its business or to carry out the purposes for which it was organized, to contract indebtedness and issue bonds subject to the approval of the President of the Philippines upon the recommendation of the Secretary of Finance. The bonded indebtedness of the Corporation, of all classes, shall not at any time exceed twenty million pesos and the issue thereof shall be subject to the conditions set forth in section four of this Act; and

(l) To exercise such powers and to do such things as may be reasonably necessary to carry out the business and purposes for which it was organized, or which, from time to time, may be declared by the Board to be necessary, useful, incidental or auxiliary to accomplish the said purpose.

SECTION 3. All corporate powers of the National Power Corporation shall be vested in a board to be known as the National Power Board; composed of five members who shall all be appointed by the President of the Philippines with the consent of the Commission on Appointments of the National Assembly. The members of the Board shall hold office for a term of three years.

The Board shall immediately organize by electing a chairman from among its members and by adopting its rules of procedure and fixing the time and place for holding regular meetings.

The members of said Board who are not in the employ of the Government of the Commonwealth of the Philippines shall each receive a per diem of not to exceed twenty-five pesos for each day of meeting of the Board actually attended by them.

It shall appoint its secretary and fix his salary which shall not exceed four thousand pesos per annum.

The Board shall render reports to the President of the Philippines and the National Assembly as provided in section five hundred and seventy-four to five hundred and seventy-seven, inclusive, of Act Numbered twenty-seven hundred and eleven.

SECTION 4. Whenever the Board may deem it necessary for the Corporation to incur an indebtedness or to issue bonds to carry out the purposes for which the Corporation has been organized, it shall, by resolution, so declare and state the purpose for which the proposed debt is to be incurred and the conditions of the bonds. In order that such resolution be valid, it shall be passed by the affirmative vote of at least three members of the Board and approved by the President of the Philippines upon the recommendation of the Secretary of Finance.

The bonds shall be issued under the following conditions: (a) they shall be in registered form and transferable at the Office of the Treasurer of the Philippines in Manila or at the Registry Office of the Department of the Treasury of the United States at Washington, District of Columbia; (b) they shall not be sold at less than par; (c) they shall be payable thirty years after the date of issue but may be redeemable at the pleasure of the Board, after ten years from the date of issue; (d) they shall bear interest at an annual rate to be determined before their issuance by the Secretary of Finance; (e) the interest may be payable quarterly, semi-annually or annually as may be determined by the Secretary of Finance before the issuance of the bonds; and (f) both principal and interest shall be payable in gold coins or its equivalent, in the discretion of the Secretary of Finance in Manila if the bonds are sold in the Philippines or in the United States Treasury if they are sold in the United States.

The bonds issued under the authority of this Act shall be exempt from the payment of all taxes by the Commonwealth of the Philippines, or by any authority, branch, division or political subdivision thereof and

subject to the provisions of the Act of Congress, approved March 24, 1934, otherwise known as the Tydings Mc-Duffie Law, which facts shall be stated upon the face of said bonds. Said bonds shall be receivable as security in any transaction with the Government in which such security is required.

A sinking fund shall be created, the total whereof at each annual due date of the bonds shall be equal to the total of an annuity of nineteen thousand three hundred seventy-one pesos and thirty-three centavos for each one million pesos of bonds outstanding, with interest at the rate of three and one-half per centum per annum. The sinking funds shall be under the custody of the Treasurer of the Philippines, who shall invest the same subject to the approval of the Board and the Secretary of Finance.

The Commonwealth of the Philippines hereby guarantees the payment by the National Power Corporation both the principal and the interest of the Bonds issued by said Corporation by virtue of this Act, and shall pay such principal and interest in case the National Power Corporation fails to do so, and there are hereby appropriated, out of the general funds in the Philippine Treasury not otherwise appropriated, the sums necessary to make the payments guaranteed by this Act: Provided, That the sums so paid by the Commonwealth of the Philippines shall be refunded by the National Power Corporation.

SECTION 5. The affairs and current business of the Corporation shall be conducted, and its rights and property shall be kept and preserved, under the direction of the National Power Board, by Manager, Assistant Manager, Treasurer and such additional officers and employees as the said Board may provide. The Auditor General shall be ex-officio Auditor of the Corporation.

The duties and powers as well as the compensation of the said officers and employees shall be such as may be defined and prescribed or fixed by the National Power Board: Provided, That no additional compensation shall be given to any officer or employee of the Commonwealth or any of its political subdivisions or of any public or semi-public corporation, who may be designated to perform additional duties in the Corporation.

The Manager, Assistant Manager and Treasurer shall be appointed by the President of the Philippines, with the consent of the Commission of Appointments of the National Assembly.

SECTION 6. Upon determination by the Manager that the construction of any water power project by the Corporation is advisable, he shall submit a report on the engineering and economic feasibility of the project together with preliminary plans and estimates of the cost of the proposed development and the estimated income to be derived therefrom.

The National Power Board may thereupon at its discretion, designate a consulting board composed of two competent and impartial engineers and one competent economist to pass upon the different aspects of the project and comment on the report of the Manager. The Board shall, with the said report and comment in view, decide whether or not the project shall

be constructed, and what changes if any shall be made in the scheme proposed by the Manager. The decision of the Board shall be final.

SECTION 7. All work of construction or repair of the Corporation involving an estimated cost of three thousand pesos or more shall be set by the Manager, with the approval of the National Power Board, to the responsible bidder who made the lowest and most advantageous bid. Notice to bidders shall be published in the Official Gazette as provided by law. In case no satisfactory bid is received, the Manager may proceed to advertise anew, or with the approval of the Board, proceed to do the work by administration. Before award or contract is made, the Manager shall require the contractor to give an adequate bond to secure the proper accomplishment of the work under contract and to satisfy all obligations for materials used and labor employed upon the same; Provided, That any repair, reconstruction or other work of an emergency nature may be authorized by the Board to be undertaken by administration or by contract.

SECTION 8. Any person or persons who shall willfully or maliciously destroy, injure, or interfere with any canal, raceway, ditch, lock, pier, inlet crib, bulkhead, dam, gate, sluice, reservoir, aqueduct, conduit, pipe, culvert, post, abutment, conductor, cable-wire, insulator, weir, bench-mark, monument, or other work, appliance, machinery, building or property of the Corporation, or who shall willfully or maliciously do any act which shall injuriously affect the quantity or quality of the water or electrical energy of the Corporation or the supply, transmission, measurement or regulation thereof, or who shall maliciously interfere with any person engaged in the discharge of duties connected therewith, shall be guilty of a felony and punished with a fine not to exceed five thousand pesos or with imprisonment, for a term not to exceed two years, or both such fine and imprisonment, at the discretion of the Court, and any injured party shall have the right to recover all damages suffered and cost of suit in a separate civil action in any court of competent jurisdiction.

SECTION 9. Subject to all existing rights, all unappropriated public waters which may be used and developed for water power purposes shall be, and hereby are, reserved from appropriation by any person, firm or corporation under any general or special law relating to the appropriation of public waters for the use of the National Power Corporation created by this Act: Provided, however, That the President, upon recommendation of the Secretary of Public Works and Communications, concurred in by the National Power Board, may, from time to time, release from this reservation any unappropriated public waters which may not be necessary for the use of the National Power Corporation.

SECTION 10. At any time that the Board certifies that the Corporation is able to furnish electric power for lighting and other purposes to any office, shop, or establishment operated and/or owned or controlled by the National Government or by any city, province, municipality or other political subdivision of the Commonwealth of the Philippines, the National Government and the government of said city, province, municipality or other political subdivision shall be compelled to secure from the Corporation as soon as practicable such electric power as it may need for lighting and the operation of its office, shops or establishments or for any work undertaken by it.

The provisions of this section shall also apply to firms or business owned or controlled by the National Government or by the government of any city, province, municipality or other political subdivision.

SECTION 11. There is hereby appropriated, out of any funds in the Philippine Treasury not otherwise appropriated, the sum of two hundred and fifty thousand pesos, for the purpose of organizing the Corporation and conducting the preliminary work: Provided, that the said amount shall be reimbursed to the Philippine Treasury upon the certification of the Auditor General that the Corporation is in a financial condition to do so, and by virtue of such certification, the National Power Board shall approve a resolution authorizing the Treasurer of the Corporation to make the necessary payment.

As soon as the construction of any project is decided upon, the Corporation may issue bonds for financing the project in accordance with the provisions of section four of the Act.

SECTION 12. This act shall take effect upon its approval.

Approved, November 3, 1936.



**APPENDIX D-1  
NATIONAL POWER CORPORATION  
SYSTEM DEVELOPMENT PROGRAM**

|                                | Units | 1974   | 1975   | 1976              | 1977              | 1978            | 1979           | 1980           | 1981             | 1982             | 1983              | 1984              | 1985           |
|--------------------------------|-------|--------|--------|-------------------|-------------------|-----------------|----------------|----------------|------------------|------------------|-------------------|-------------------|----------------|
| <b>Demand</b>                  |       |        |        |                   |                   |                 |                |                |                  |                  |                   |                   |                |
| Peak Demand                    | MW    | 1,353  | 1,420  | 1,459             | 1,604             | 1,984           | 2,182          | 2,400          | 2,641            | 2,905            | 3,195             | 3,515             | 3,860          |
| Energy Requirement             | GWH   | 8,242  | 8,635  | 9,573             | 1,097             | 12,667          | 13,274         | 14,601         | 16,051           | 17,657           | 19,434            | 21,373            | 23,515         |
| <b>Supply</b>                  |       |        |        |                   |                   |                 |                |                |                  |                  |                   |                   |                |
| Installed Capacity             | MW    | 1,945  | 1,940  | 2,250             | 2,500             | 2,940           | 2,955          | 3,050          | 3,435            | 3,820            | 4,475             | 5,130             | 5,135          |
| System Capacity                | MW    | 1,633  | 1,555  | 2,155             | 2,385             | 2,819           | 2,871          | 2,923          | 3,277            | 3,631            | 4,253             | 4,876             | 4,923          |
|                                | GWH   | 10,555 | 10,526 | 13,033            | 14,312            | 17,160          | 17,500         | 17,840         | 18,932           | 19,240           | 23,075            | 25,910            | 27,250         |
| Reserve Percentage             |       | 35.9   | 24.5   | 32.0              | 32.2              | 42.1            | 31.6           | 21.8           | 19.4             | 25.0             | 33.1              | 38.7              | 27.7           |
| Plant Additions                |       |        |        | <u>Malaya 1</u>   | <u>Selangor 2</u> | <u>Malaya 2</u> | <u>Tirol 3</u> | <u>Tirol 4</u> | <u>Selangor</u>  | <u>Selangor</u>  | <u>Selangor 1</u> | <u>Selangor 2</u> | <u>Tirol 9</u> |
|                                |       |        |        | (1) 312 MW        | 150 MW 505        | 330 MW          | 52 MW 340      | 52 MW 340      | 1-3 152          | 4-5 152          | 570 MW            | 570 MW            | 52 MW          |
|                                |       |        |        | 2037 GWH          | GWH               | 2168 GWH        | GWH            | GWH            | MW 704 GWH       | MW - GWH         | 3495 GWH          | 3495 GWH          | 340 GWH        |
|                                |       |        |        | <u>Panabangan</u> | <u>Tirol</u>      |                 |                |                | <u>Tirol 5</u>   | <u>Tirol 6</u>   | <u>Tirol 7</u>    | <u>Tirol 8</u>    |                |
|                                |       |        |        | 162 MW            | 162 104           |                 |                |                | 52 MW            | 52 MW            | 52 MW             | 52 MW             |                |
|                                |       |        |        | MW 293 GWH        | MW 630 GWH        |                 |                |                | 340 GWH          | 340 GWH          | 340 GWH           | 340 GWH           |                |
|                                |       |        |        |                   |                   |                 |                |                | <u>Kalayan 1</u> | <u>Kalayan 2</u> |                   |                   |                |
|                                |       |        |        |                   |                   |                 |                |                | 150 MW           | 150 MW           |                   |                   |                |
|                                |       |        |        |                   |                   |                 |                |                | -32 GWH          | -32 GWH          |                   |                   |                |
| <b>NEC Development Program</b> |       |        |        |                   |                   |                 |                |                |                  |                  |                   |                   |                |
| Installed Capacity             | MW    | 494    | 494    | 494               | 764               | 792             | 854            | 909            | 1,291            | 1,676            | 2,331             | 2,326             | 3,041          |
| System Capacity                | MW    | 377    | 377    | 377               | 597               | 701             | 753            | 805            | 1,159            | 1,513            | 2,135             | 2,757             | 2,309          |
|                                | GWH   | 2,114  | 2,114  | 2,114             | 3,393             | 4,073           | 4,413          | 4,753          | 5,845            | 6,153            | 9,333             | 13,823            | 16,153         |

a/ Includes estimated capacity and demand of private, vehicles and self generating units of private industry.

b/ All plant additions except Malaya 152 will be concluded by UPD. Malaya 162 are being concluded by MECO.

APPENDIX D-2  
NATIONAL POWER CORPORATION  
SYSTEM DEVELOPMENT PROGRAM

| Mindanao Region (NPC)       |       |                                   |       |  |       |       |   |   |                                 |       |                          |
|-----------------------------|-------|-----------------------------------|-------|--|-------|-------|---|---|---------------------------------|-------|--------------------------|
|                             | 1975  | 1976                              | 1977  | 1978   | 1979  | 1980  | 1981  | 1982  | 1983                            | 1984  | 1985                     |
| <u>Development Projects</u> |       | Agua VI No. 5 77/1<br>50 MW 0 GWh |       | Agua II 78/1<br>180 MW 385 GWh<br>DLPCO-Diesel 77/1<br>62 MW 414 GWh |       |       | Agua VII 80/7<br>45 MW 177 GWh<br>Agua I 80/7<br>100 MW 477 GWh | Thermal I 81/7<br>150 MW 585 GWh<br>Thermal II 82/1<br>150 MW 585 GWh | Agua III 82/7<br>150 MW 543 GWh |       | Agua V<br>150 MW 543 GWh |
| <u>System Capability</u>    |       |                                   |       |  |       |       |   |   |                                 |       |                          |
| Installed Capacity (MW)     | 152   | 152                               | 202   | 444  | 444   | 444   | 589   | 889   | 1,039                           | 1,039 | 1,189                    |
| Available Energy (GWh)      | 1,077 | 1,077                             | 1,077 | 1,876  | 1,876 | 1,876 | 2,559   | 4,029   | 5,455                           | 5,455 | 6,405                    |
| <u>Satisfiable Demand</u>   |       |                                   |       |  |       |       |   |   |                                 |       |                          |
| Energy (GWh)                | 570   | 705                               | 520   | 1,450  | 1,630 | 1,850 | 2,400   | 3,600   | 4,500                           | 5,400 | 6,243                    |

**APPENDIX D-3**  
**NATIONAL POWER CORPORATION**  
**SYSTEM DEVELOPMENT PROGRAM**

|                            | <u>Visayas Region (NRC)</u> |             |                       |  |                       |  |  |                         |  |   |
|----------------------------|-----------------------------|-------------|-----------------------|--|-----------------------|--|--|-------------------------|--|---|
|                            | <u>1975</u>                 | <u>1976</u> | <u>1977</u>           | <u>1978</u>                              | <u>1979</u>           | <u>1980</u>  | <u>1981</u>                                  | <u>1982</u>             | <u>1983</u>  | <u>1984</u>                             |
| <u>Development Sources</u> |                             |             | Amian(D) 1/2<br>11 MW | Rebol (D)<br>11 MW<br>Cebu (D)1<br>50 MW | Panay (D)1-4<br>30 MW | Cebu (D),2<br>75 MW<br>Amian(D)3/4<br>11 MW<br>Panay(D)5<br>7 MW | Cebu (T) 1<br>50 MW<br>Tongonan(G)1<br>75 MW | Tongonan (G)2,<br>75 MW | Panay (D)6<br>7 MW<br>Cebu (T)2<br>50 MW<br>Jalaur(H)<br>50 MW | Walis (H)<br>10 MW<br>Ulat (N)<br>35 MW |
|                            |                             |             |                       |  |                       |  |  |                         |  | Bag (H)<br>60 MW                        |
|                            |                             |             |                       |  |                       |  |  |                         |  | 158 GWE                                 |
| <u>System Capability</u>   |                             |             |                       |  |                       |  |  |                         |  |   |
| Installed Capacity (MW)    | 2                           | 2           | 13                    | 74                                       | 104                   | 197  | 322  | 397                     | 504  | 543                                     |
| Available Energy (GWE)     | 8                           | 8           | 71                    | 419                                      | 590                   | 1,120  | 1,920  | 2,413                   | 2,931  | 2,395                                   |
|                            |                             |             |                       |  |                       |  |  |                         |  | 2,154                                   |

Notes: (D) = diesel  
 (T) = thermal  
 (G) = geothermal  
 (H) = hydro

Source: NRC;

## APPENDIX E

### FRINGE BENEFITS OF NATIONAL POWER CORPORATION EMPLOYEES

#### HEALTH BENEFITS

The enterprise extends free medical, dental and optical services to the employees. Free medical and dental services on consultation basis are provided to immediate members of employees families. In particular, the following are the health benefits of NPC employees:

##### Medical

1. Free medical services including medicines
2. Advance payment for medical expenses equal to their gross salary plus P300.00. The excess is paid by employees through payroll deductions in equal monthly payments.
3. Maternity pay plus expenses amounting P120.
4. Free annual medical examination

##### Dental

1. Free dental services at NPC dental clinic
2. A maximum of P200 is granted to employees with at least six months service

##### Optical

1. Free eyeglasses for employees not to exceed P30 in value. NPC assists its employees in accuring Medicine Benefits exclusive of the aforementioned health benefits.

#### RETIREMENT BENEFITS

Outside of the Government Security and Insurance System (GSIS) retirements benefits for its employees, NPC provides supplementary gravity pay equivalent to one month salary for every year for the following:

1. An employee not covered by GSIS benefits who resigns voluntarily after completing 6½ years of service.
2. An employee not covered by GSIS benefits who is separated from service not due to voluntary resignation or dismissal after completing 4 years of service.

HOUSING AND OTHER BENEFITS

The enterprise has also provide the following benefits:

1. Low-cost housing to some 500 of its permanent employees.
2. Free bus service for employees residing in Metro Manila Area.
3. Subsidized food at the corporate cafeteria.
4. ₱2,000 death assistance to legal heirs, provided said employee had continually rendered 6 months of service.